Conceptions
An Exploration of Infertility and Assisted Conception in India

By

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Abstract

This thesis is an exploration of infertility and assisted conception in contemporary India. It explores some of the prominent themes underpinning the cultural engagement with reproductive disruption and seeks to understand how people – inflicted infertile individuals and treatment providers – grapple with conception gone-awry. In doing this, the research locates both clinical and non-clinical responses to the process of assisted conception, within the wider cultural context that views infertility as highly undesirable.

The research is multi-sited and attempts to connect a number of disparate domains in which the experience of infertility and the promotion and management of its treatment lies dispersed. This has principally entailed an eclectic engagement with a number of diverse 'locales,' such as the political economy of health in India, the mass media as a field for promoting and contesting assisted conception, ancient norms and ideas about fertility and their reverberation in contemporary Hindu conceptual domain. The thesis highlights the importance of this cultural frame for producing stigma and as a 'sense making' resource for understanding assisted conception. Taken together, these locales unravel the complex nature of infertility and assisted conception in India.

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Author's Declaration

I declare that the work in this dissertation was carried out in accordance with the Regulations of the University of Bristol. The work is original except where indicated by special reference in the text and no part of the dissertation has been submitted for any other degree.

Any views expressed in the dissertation are those of the author and in no way represent those of the University of Bristol.

The dissertation has not been presented to any other University for examination either in the United Kingdom or overseas.

Some of the material contained within this thesis has previously been published and is forthcoming in the following papers:

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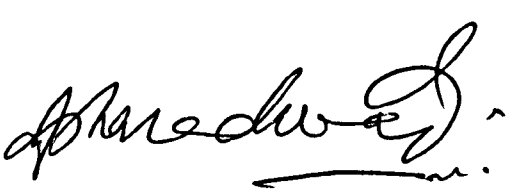
SIGNED:  DATE: 4.01.2002.

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Part I

Chapter: 1
Conceptions: Exploring Infertility & Assisted Conception in India: An Introduction

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This thesis is about infertility and assisted conception in India. It seeks to address the issue of how assisted conception is being understood both by the infertile and their clinicians by placing this encounter in the broader cultural context in which these technologies are being received, used and promoted. The thesis is entitled *conceptions* so as to invite attention to cultural conceptions that lie behind the 'struggles' in the lives of the protagonists (patients/clinicians) who feature in this research. The term 'conceptions', however, appears problematic to a listening trained in filtering its semantics in the classic positivist/empiricist truth seeking tradition. It sounds pejorative because it renders assertions deemed conceptions as false, untrue and mere beliefs, all pointing to a flawed understanding of 'facts', which modern science states to be something else. An anatomical exploration of the term, on the other hand, yields a rich multifarious body of paradigmatically encrusted meaning. According to the Oxford Concise Dictionary (1998) the term conception means:

1. The act or an instance of conceiving; the process of being conceived.
2. An idea or plan, esp. as being new or daring.
3. Understanding, ability to imagine.

An intimate engagement with this 'layered' meaning allows for an embodied cognition of the term 'conceptions'. The usage of the term, however, goes much deeper than establishing a mere correspondence between the biological act of conception and its medically assisted version. In shaping the overall project of understanding infertility and assisted conception in India, this thesis on one level draws on the term to contain and problematise the biological act of conception, assisted by modern biomedical edifice, by showing how the two are in the 'process of being conceived' by biomedical experts and infertile patients. On an another level, this research attempts to deal with social conceptions about infertility and its biomedical management, focusing on how they are being understood not only as 'new daring ideas', as they emerge in the media discourses and in the politco-commercial face of biomedical expertise, but also as an ancient 'imagination' of infertility management, a cultural 'frame' that resonates with contemporary clinical as well as social experience of infertility. It is to all these conceptions that the sociological project of 'understanding' the finer relationships between these myriad strands attaches itself.

Medical and non-medical discourses have for long defined reproductive technologies as old and new.[1] A common assumption is that the recent advances in reproductive medicine can conveniently be accommodated under the 'new' label and the rest relegated to an old stock. However, to avoid ambiguity, the term 'assisted conception' is used in this thesis to mean any bio-medical or technological intervention geared towards inducing conception on behalf of an infertile individual or couple. This helps locate a whole range of biomedical practices of infertility management in a cultural context without recourse to any lengthy explanations on their 'age' or 'newness'.

As a point of departure, I seek to bring to attention some of the debates surrounding the conceptive technologies in the 'western world'. I have isolated the idea of 'nature' as lying central to the Euro-American worldview which the social science debates are endeavouring to unpack and problematise. The dispersion of these technologies to other cultural locales – India being but one example – has engendered rather different cultural concerns. This chapter helps contextualise the rapidly globalising assisted conception technologies by outlining the need to recognise how contrasting cultural locales absorb and accommodate to 'biomedically assisted conception' in different ways. Finally, I provide a brief overview of the thesis and a short synopsis of each chapter.

Nature/Culture in the Euro-American Worldview

Sociology and anthropology in the west have remained largely silent on the issue of infertility and assisted conception, in what is commonly referred to as the third/developing world. Scholarship, both feminist and non-feminist, has in the main focused on the impact of assisted conceptive techniques on the 'Euro-Americans'. In these scholarly accounts, the concept of 'nature' has stood as an important theme, foregrounding both feminist concerns vis-à-vis the impact of 'new reproductive technologies' on western women and social-anthropological debates on its implications for western ideas of kinship and relatedness.

Feminist cartography has for long been charting the cultural genealogy of nature in western civilisation. The pre and post enlightenment engagement with 'nature' in Europe emerges as rooted in a cultural conception of man's superiority to nature - a maxim enshrined in the book of Genesis:

> Fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the air and over every living thing (Genesis 1:28).

This ancient belief of man's right to dominate nature receives a further fillip in the work of scholars of the enlightenment who propounded a philosophical view of the universe as mechanistic, following predictable laws; those who could liberate themselves from fetters of medieval superstition could discover through science and manipulate through technology (Davis-Floyd: 1990). According to Carolyn Merchant, during the seventeenth century period of rapid commercial expansion within Europe, machine came to replace the organism as the underlying metaphor for the organisation of man's universe. Prior to this idea, the earth had been viewed as a living organism infused with a female 'world-soul'. She further argues that philosophers like Descartes, Bacon and Hobbes:

> [T]ransformed the body of the world and its female soul...into...a mechanical system of dead corpuscles, set into motion by the creator, so that each obeyed the law of inertia and moved only by external contact with another moving body...because nature was now viewed as a system of dead, inert particles *moved by external rather than inherent forces*, the mechanical framework itself could legitimate the manipulation of nature [emphasis added (Merchant: 1983, 193 in Davis-Floyd: 1990)].

By the seventeenth century, the beginnings of modern science, Descartes had effected a conceptual separation between mind and body upon which the metaphor of body as machine came to be predicated (Burkitt: 1999). Since the body was viewed as an appendage of the mechanistic natural realm, it came to be (medically) viewed as a mere mechanism that could be 'taken apart and put back together' (Kleinman: 1995, 36). Some feminists argue that the man who established the idea of the body as a machine firmly established the male body as the prototype of this machine (Rothman: 1982, Davis-Floyd:

1990, 1998). This is seen as a significant departure from the ideas propounded in medical texts from the ancient Greeks up until the eighteenth century that described male and female bodies as fundamentally similar. Women had hitherto been conceptualised as embodying the same genitals as men inside their bodies, thus relegating women to 'a lesser version of the male body' (Laqueur: 1990, Oudshoom: 1999). Merchant further argued that any deviations from the male prototype became valid grounds for viewing female biology as abnormal, defective and as untenable as nature itself, thus in need of manipulation by man. Floyd similarly concludes that the demise of the midwife and the rise of male-attended mechanically manipulated birth followed close on the heels of the wide cultural acceptance of the female body as a defective machine (Davis-Floyd: 1990).

This cultural imagination that placed female and nature along the same continuum had in fact received critical anthropological attention long before Merchant's ground breaking *Death of Nature* (Rosaldo and Lamphere: 1974, MacCormack and Strathern: 1980). MacCormack (1980) had questioned links between nature and women as given and, together with a group of scholars, MacCormack and Strathern had persuasively critiqued 'universalistic' visions of natural and cultural that located femaleness in biology (nature) and maleness in the social domain (MacCormack and Strathern: 1980). These early feminist and anthropological critiques profoundly influenced the social scientific view of biomedicine and subsequent feminist accounts of reproductive health and technologies. Feminists now began to question the 'othering of women' (Oudshroon: 1999) as a special category of 'patients' within the medical domain from the eighteenth century through to the biomedical gynaecological discourses in the nineteenth and twentieth centuries (e.g. Martin: 1987, Moscucci: 1990, Floyd-Davis: 1990, 1992, 1994,

Oudshoorn: 1994). With biomedicine firmly established as a fundamental source of male assumptions about women's bodies as being closer to nature, and therefore a legitimate object of scientific study (Oudshoorn: 1999), feminists began critically evaluating new forms of 'biomedicalisations' of the reproductive process (Clarke and Olesen: 1999).

The 'new' technical possibilities of bypassing infertility only accentuated feminist disquiet over the increasing medicalisation of birth and the implicit metaphoric postulations of manipulating unpredictable nature (women) through cultural (male) knowledge and artefacts. Whereas the earliest polemical accounts, like Firestone's *The Dialectic of Sex* (1971) and Marge Piercy's *Women on the Edge of Time* (1976), viewed technologies of procreation as liberating women, the radical feminist challenge of the early eighties - spearheaded by Arditti et al's *Test Tube Women* (1984), Andrea Dworkin's *Right-Wing Women* (1983) and Gena Corea's influential *Mother Machine* (1985) and *Man-Made Woman* (1987) - critiqued the new reproductive technologies as instruments of oppression where dominant male scientific enterprise was engaged in dehumanising, repressing and systematically objectifying women[2].

Subsequent research was less conspiratorial in its tenor and tone but critically expanded on these earlier concerns, in particular the work of Stanworth (1987), Spallone and Steinberg (1987), Klein and Rowland (1988), Lasker and Borg (1989), Spallone (1989), Klein (1989). These scholars were now beginning to argue that a 'particular feminist reading [mainly the radical feminist challenge] which sees in these technologies an unmitigated attack on women was inadequate' (Stanworth: 1987, 3). Though equally these feminists were raising questions about the experimental nature of reproductive

technologies and the fears of turning women's bodies into 'experimental sites' (Klein and Rowland: 1988).

In the 1990s, however, there emerged a body of feminist scholarship that came to negotiate with infertility and assisted conception as something to be critically understood and accommodated rather than overtly rejected (e.g. Brike et al.: 1990, McNeil et al.: 1990, Sandelowski: 1990, 1991, Strathern: 1992b, Ragoné: 1994, Cussins: 1996, Franklin: 1997, Franklin and Ragoné: 1998). The focus was now much more on the 'lived worlds of infertility and reproductive medicine' (Cussins: 2000), though adverse effects of technologies on women were not being entirely ignored and 'the ideological hegemony of the technocratic paradigm as potential future-shaper' was being critically revisited (Davis-Floyd: 1994, 1125, Davis-Floyd and Dumit: 1998). The biomedical perspective on infertility, like other biological processes, was therefore being seen as illustrative of 'reflexivity of values in medicine and society', replicating cultural norms in biomedical ideologies about the nature and treatment of disease (Becker and Nachtigall: 1994). 'Classic' scholars like Emily Martin were attracting criticism from within this new feminist terrain where academics like Pfeffer (1993) were beginning to question Martin's interview schedule that excluded infertile women and their experiences, thus conveying the impression that 'all women who live in Baltimore, USA...inhabit fertile bodies' (Pfeffer: 1993, 176). Greil (1994), on the other hand, was critiquing Martin and Davis-Floyd for treating women's responses to medical definitions as an 'epiphenomenona' without giving due attention to women's creativity and agency in working within the medical framework to achieve their own ends, like the infertile women in his study, who transformed the medical model without accepting or rejecting it to better meet their own

goals. Franklin (1997) similarly showed, in the case of women undergoing IVF, that despite the cost and pains, women endorsed the technique and felt that it had 'made something of them' as women (Franklin: 1997, 165). These scholarly negotiations with the 'new technologies of conception' were partly borne out of an interest in examining the 'lived worlds of infertility and reproductive medicine'. Feminists now 'granted the technologies a much less monolithic, oppositional and inhuman role', in favour of 'a much more mediating and active role than their predecessors had' (Cussins: 2000, 55-56).

These shifts within the feminist terrain concealed a broader tension that Stanworth (1987) had earlier outlined as being central to the feminist concern, where 'on the one hand, medical and scientific advances offered women a greater chance to decide if, when and under what conditions to mother, while on the other, they increased the potential for others to exercise an even greater control over women's lives' (Stanworth: 1987, 4). Charis Cussins (2000) echoes this dilemma in a recent comprehensive review of the growth of feminist thinking in relation to infertility and assisted conception. In charting the evolution in the feminist discourse she isolates two broad phases – phase I (1984 to 1991); phase II (1992 to 1999) – while arguing that there is a paradoxical tension in feminist engagement with infertility and reproductive technologies, which lies between empathising with the burden of infertile women, and their need to seek treatment, and the risk that in doing so they perpetuate already entrenched gendered roles and stratifications (Cussins: 2000).

This feminist quandary is in a sense produced in relation to the dominant 'technocratic imperative' permeating the Euro-American social matrix:

> *If it can be done, it must be tried...if it can be tried, then I must try it.* In other words, the existence of new reproductive technologies (NRTs) opens up new potentials for reproduction; once they are open, because they exist, they cannot be ignored. At the same time, options that arise out of a more organic or holistic worldview...are rendered invisible in the face of the dazzling potentials of the NRTs (Davis-Floyd and Dumit: 1998, 7).

Franklin's (1998) research similarly suggests that women expressed two primary aims in relation to IVF: if they succeed they would achieve the ultimate goal of a take-home baby, and if they failed, at least they would know they had tried everything. 'The pair of alternate resolutions' according to Franklin, 'was seen to guarantee success one way or the other, a positive outcome was assured' (Franklin: 1998, 107). This 'technocratic imperative' ironically re-emphasises the Euro-American distrust of nature at one level. Davis-Floyd and Dumit have succinctly articulated this distrust in saying that 'because we so deeply trust technology, we cannot trust nature anymore. Natural reproduction, when successful, becomes a special category: lucky' (Davis-Floyd and Dumit: 1998, 9).

Parallel to these debates, the concept of nature itself had become a subject matter of intense social scientific examination. While Khun (1970) unprecedentedly problematised the working of science, many scholars questioned the very idea of an untainted 'nature' waiting to be scientifically uncovered by showing how natural reality is actively constructed as an object of scientific study (Latour and Woolgar: 1979, Gilbert and Mulkay: 1984, Latour: 1987). Correspondingly, nature and the life sciences included under the rubric of biology and biomedicine came to be viewed by feminists as 'socially, historically, culturally and economically constructed' (Clarke and Olesen: 1999, 9). Feminist anthropologists like Strathern were quick to point how different historical periods in England had defined and debated nature differently (Strathern: 1992a). The

post-modern scholarship expressed this new *state of nature* by questioning 'what remains of the natural when nature is cultural - a product of discourse – and when what had been the territory of the natural is taken over by the intervention of human engineering' (Robertson et al.: 1996). From within the disciplinary boundaries of sociology scholars were posing similar but more specific questions like 'how to think nature?' with a view to paying critical attention to the issue rather than providing any grand narrative of answers (Haimes and Williams: 1998). On the other hand, anthropologists like Rabinow were actually predicting the future, where 'nature will be known and remade through technique and will finally become artificial', just as culture would become natural (Rabinow: 1992).

Whilst scholars like Merchant had placed the emergence of medicine in the context of rapidly expanding industrialism in Europe, that displaced the organism in favour of the 'machine metaphor', the postmodern scholarship scrutinised biomedicine in the context of emerging technocratic culture within (late/post) industrial society. Similarly, if the industrial technology was geared to produce a particular kind of mechanistic rationality, which looked at the organic in terms of the inorganic (machine), then new emerging 'technocratic' culture produced a rationality that 'juxtaposed' the organic and the inorganic. It has thus become:

> ...routinely thinkable in the post-industrialism of the late twentieth century - or at least presentable in Euro-American media - to make play with juxtaposing images of the organic and inorganic. We are not just supposed to think that machines are like bodies, but that there are aspects of machines that function no differently from parts of the human body even as human beings may embody technological devices within themselves (Strathern: 1992b, 2-3).

This positioning of the organic in relation to the inorganic (or non human) heralded the birth of 'juxtapositions' (Strathern: 1992b), 'hybrids' (Latour: 1992) and 'cyborgs'

(Haraway: 1990, 1991). Haraway's pronouncements that 'we are all cyborgs now', 'cybernetic organisms', 'a fusion of the organic and the technical', 'shocked into being from the force of the implosion of the natural and the artificial...' (Haraway: 1999, 42-43), further disrupted the idea of 'natural reproduction.' The cyborg metaphor has re-emphasised how reproduction is always mediated by different kinds of 'technoscientific interventions' (Davis-Floyd and Dumit: 1998, 11) and it has touched all aspects of assisted conception. Semen, a bodily fluid, technologically processed by semen banks, became *'technosemen'*, a cyborg (Schmidt and Moore: 1998). IVF similarly came to be seen as a 'hybrid of human and machines, of physical practices and textual practices' combining 'old and new reproductive technologies'; a cyborg that allowed a retrospective glance at the 'constructed nature of conception...' (Mentor: 1998, 69-70). The disjunction between the metaphor of body as machine and body as cyborg has also rendered the late twentieth century engagement with technologies like IVF 'fundamentally schizophrenic and ambivalent' (Mentor: 1998). The issue at hand, therefore, is no longer one of critiquing metaphors of bodies working like machines but machines working both with and within bodies, and while 'natural conception/birth' is still desirable, feminists are equally alert to women's growing unease with leaving 'reproduction' to the caprices of 'nature'.

The cyborg metaphor not only problematised the process of 'natural conception,' but more significantly 'what was now to count as natural' and its implications for the ideas of kinship/relatedness. Anthropologists had been arguing for some time that the twentieth century conception of nature was inherently biological (Ingold: 1986). As a consequence the idea of natural kinship became biologised and what now counted as

natural acquired rather 'specific meaning' (Strathern: 1992b). The Euro-American 'reproductive model,' according to Strathern, is premised on suppositions about the connections between natural facts and social constructions. 'The social recognition of parenthood must follow the biological fact' [act of having sex, transmitting genes and setting into motion the biological development of the embryo followed by the foetus], is a modern and twentieth-century view (Strathern: 1999). Technologically, however, assisted biological parenthood does not replicate with exactness the old concept of natural kinship, but it does reproduce the idea with a difference by introducing a new contrast between artificial and natural process, where assisted conception creates the 'biological parent as a separate category' (Strathern: 1992b, 19-20). The connections between the natural and the social aspects of kinship are therefore rendered variable, with assisted conception throwing up possibilities of different ways of configuring biological kinship, i.e. of other ways of 'doing' kinship that configures the mixture of nature and culture differently (Cussins: 1998a, 43, 63). The twentieth century 'natural parent' – one who embodied the genetic and social 'kin' credentials – is dispersed either by enabling fertilisation outside the body or by involving donated 'third party' gametes. Franklin thus speaks of the late twentieth century British kinship dilemma, 'which is the question of how to make sense of new forms of technological assistance to conception which create new "relativities" in the space where certain relations once stood' (Franklin: 1997, 7). Franklin's concern is what can be termed 'doubly focused', firstly on the relationship between 'traditional' kinship idioms of relatedness and the new forms of connectivity put in place by assisted conception, and secondly, on the 'relationship with science and technology' which is

rapidly complicating the Euro-American understanding of the self. The anthropological focus has thus come to rest on:

> [T]he emphasis Euro-Americans give to personal and kin identity via the facts of biology, and thus the cultural nexus between conception, sexual connection and individuality that is simultaneously reinforced and bypassed by the new reproductive technologies (Strathern: 1999, 25).

Nature, so assisted, is compromised in one significant way; it is no longer a domain from which intervention is absent and 'what is taken as given, is no longer given by nature' (a natural bounty) but is 'visibly circumscribed by technological capability' (Strathern: 1992b). Strathern places *this loss of nature* in the wider 'enterprise culture' of the late twentieth century, where 'prescriptive consumerism' dictates choice which is implemented through what one chooses and in the process derives satisfaction from meeting the desire to consume. In this Euro-American context, where life is being increasingly 'enterprised-up', Strathern discerns a subtle shift in the idea of naturalness as related to conception from being 'part of the workings of physiology to attributing it to parental desire'. Desire in the enterprise culture becomes choice, both in the consumerist sense and as a 'natural' desire to be a parent. The technological assistance is itself construed as natural in that 'as long as some element of the entire process of childbirth can be claimed as natural [e.g. a couple's own gametes, or womb as natural space], technological intervention appears enabling...[and transforms assistance to mean]...nature sometimes needs a helping hand' (Strathern: 1992b, 56-57). This is a potent sign of the post-modern age for some feminists, where the Euro-Americans have 'moved so far into the cyborg realm that only those technological transfusions

...[called]..."assisted reproduction" – safe, monitored, controlled – are considered "natural"...' (Davis-Floyd and Dumit: 1998, 9).

From the foregoing it appears that central to the *biomedicalisation* of infertility is the concept of nature, both as a category to be opposed and as a category to be delivered. Whilst *cyborgification* has broken down and juxtaposed the nature culture binary, as a process of cultural change it appears to have turned the 'cyborg experience' into one responding to (and improving) natural processes and redefining them. Arthur Kleinman (1995) argues that 'biomedicine instantiates the western tradition's idea of progress', to which one can add Franklin's contention that the interplay between reproduction and technology deploys two of the most powerful Euro-American symbols of future possibility: children and scientific progress (Franklin: 1997, 166). It is in this respect that the cyborg conception and eventual birth 'instantiates' the idea of progress and continuity with the future. Establishing this connection has displaced and reconfigured certain core cultural ideas about nature in the Euro-American worldview and it is this that much of the feminist and social-anthropological scholarship continues to debate.

This vast body of western literature and debates – and others – relates to this thesis in two crucial ways. Firstly, despite the manifestly different cultural context in which technologies of conception are embedded in India, the selective use of some the substantive ideas in this literature helps locate these globalising western fertility techniques in local cultural concerns. Secondly, some of the concerns raised in both feminist and non-feminist literature emerge as particularly relevant in formulating future research agendas – which I explore in the conclusion of this thesis - critically examining the rapid spread of these technologies in India.

Infertility and Assisted Conception in a Global Perspective:

Acknowledging IVF to have become a global phenomenon, Strathern contends that 'diverse locations will find diverse reasons for its use' (Strathern: 1999). These diverse locations unfortunately have received very little social scientific attention. This continuing impasse in the feminist and social-anthropological writings would have persisted uninterrupted had Marcia Inhorn's groundbreaking research in Egypt (1994a, 1996a) not broken this silence on the need to examine infertility in non-western cultural settings and its links with rapidly globalising technologies of conception. The Egyptian example has laid bare the bias, both within academic research and within the international health community, which has its roots in an ideological orientation which views unchecked fertility leading to over population as a predominant attribute of the developing world as against high levels of infertility (Inhorn and Buss: 1994). An exclusive focus, in the western feminist scholarship, on the problems of 'affluent western women' gives the impression that infertility is 'an exclusively western, bourgeois concern' and in this respect these feminist social scientific endeavours are 'particularly guilty of wearing cross-cultural blinders' (Inhorn: 1994a, 26). Thus the 'feminist silence on the plight of non-western infertile women' and the idea of helping 'infertile subpopulations in high-fertility non-western settings' has never been a high priority concern within academia and in the international population circles (Inhorn and van Balen: forthcoming).

Inhorn's work drew attention to the silent but swift expansion of high-tech conception in a 'so-called overpopulated' Middle Eastern region of the world deemed to be less developed (Inhorn: 1996b). Inhorn showed how many infertile poor Egyptian

women were 'peripatetic pilgrims' travelling to sacred sites, physicians, pharmacists and healers in their 'quest for conception' (Inhorn: 1994a, 29). She examined their encounters with the 'new' world of 'new reproductive technologies' by focusing on the 'local moral worlds' (Kleinman: 1992) of these women, who were often forced to grapple with difficult therapeutic decisions given the importance of Islam in their lives which guided their 'therapeutic praxis' (Inhorn: 1994a).

Whilst Inhorn's study is pathbreaking to the extent that it examines the spread and take up of assisted conception in a non-western setting, her work on the gendered experience of infertility and ethnomedical healing complements a long and steady trickle of research on infertility emerging from various non-western sites in the previous decade. A few notable examples are:

Feldman's (1994) study of infertility in the Cameroonian Grassfields where 'violent imagery of plundered kitchens, cannibalistic witchcraft and theft permeates Bangangté women's accounts of infertility and child loss' (Feldman: 1994, 463). Larsen's African studies exploring differentials in infertility in the Cameroon and Nigeria (Larsen: 1995) and childlessness, subfertility and infertility in Tanzania (Larsen: 1996) are two further additions. Sundby's account of infertility in Gambia explores traditional health care practices involving healers and spiritual leaders, who are often invoked as the first line of treatment in place of 'modern health care' (Sundby: 1997). Gerrits' research into infertility amongst a matrilineal ethnic group in Macua, Mozambique, similarly found that infertile women adopt various strategies to have a child; of these the predominant recourse was visits to traditional healers as against modern hospital based medication (Gerrits: 1997). Pearce's study amongst the Yoruba of South-western Nigeria explored

the cultural perceptions of infertile and childless women (Pearce: 1999). Boonmongkon's (2000) research looking at infertility over the life course of Thai women and a study on infertility in North Vietnam (Pashigian: 2000) provide refreshing perspectives from the Far East.

From within the South Asian sub-continent scholars have begun to examine the neglected topic of infertility. Bhatti et al. (1999) have studied the treatment-seeking quest of infertile women in squatter settlements of Karachi, Pakistan, whereas Nahar et al. (2000) have examined the lived experience of infertility amongst the urban slum populations in Bangladesh. Within India, Neff (1994) has examined how amongst the Nayars of Kerala, the construction of infertility is traced matrilineally. In addition, studies in the recent past have researched psychosocial consequences of childlessness in the Ranga Reddy district of Andhra Pradesh (Unisa: 1999), treatment-seeking behaviour amongst the urban slum populations in Bombay (Mulgaonkar: 2000) and the experience of stigma amongst married childless women in South India (Riessman: 2000).[3]

Whilst these studies point to the emergence of rapidly accumulating *new cross-cultural insights* into infertility, the spread of high technology assisted conception to so-called third world sites continues to remain un/under researched. The experience of 'modern biomedicine' for many infertile persons in the studies cited above remains restricted to outdated and dangerous gynaecological interventions like dilatation, curettage and thermocauterization of the cervix (Inhorn and Buss: 1993, Sundby and Jacobus: 2000). Consequently the focus remains on very poorly trained medical personnel and under-resourced medical facilities that often have as severe an iatrogeneous impact on reproductive health as do some traditional medications (Mogobe: 2000). Critics from

within the third world sites have also questioned the transfer of assisted conception to poor resource countries. Okonofua (1996), professor of Obstetrics and Gynaecology, for instance argues that two attempts to set up IVF clinics in his native Nigeria demonstrated that, despite the availability of professional expertise, the necessary infrastructure and funding was lacking. In addition, he argues that costly reproductive technologies divert money from high priority health problems to benefit a small segment of the infertile population (who can presumably afford it). Dilemma, such as whether to invest in high-tech medical technologies in the face of gruelling poverty and primary health concerns, is a common experience for developing countries grappling with limited resources. It is therefore understandable that the treatment of infertility and take-up of technologies, such as IVF is rarely a part of state population programmes in developing countries like Egypt and India, where conception technologies have remained confined to the private sector (Inhorn: forthcoming, also chapter 3).

Infertility and Assisted Conception in India: Some Preliminary Issues

In India, assisted conception has become a visible part of the contemporary Indian reality. Popular culture, print and electronic media and the expansion of IVF clinics in many Indian cities and towns, have together popularised and normalised the idea of 'test-tube babies'. Though long-considered a stigmatised condition, infertility and its cultural (biomedical) management has never before in the history of the Indian nation been so vocally and publicly articulated. This is surprising, given that there remains a definite ambiguity regarding the exact magnitude of infertility, its epidemiological profile and the status of medically assisted conception technologies. Most 'experts' interviewed for this research were of the view that 10 to 12 per cent of ever-married couples in India are

infertile - i.e. between 10 to 12 million couples. However there is no scientific basis to this figure, as most 'experts', on persistent probing, could not reveal the source of this data. Extensive literature searches could only uncover two publications, one of which presents an analysis of the pattern of childlessness among 'ever married women in India' based on the 1981 Census data and finds only 5.6 per cent of women childless (Vemuri and Manohar: 1986). Another source draws on the National Family Health Survey, India (NFHS) data and puts the incidence of childlessness at 2.4 percent of currently married women over 40 (Jejeebhoy: 1998). My own reading of the NFHS data – 1992/93 - suggests that 3.8 per of currently married women [N=84678] are listed as 'declared infecund,' who have no living children. These figures, however, lack clarity on the issue of the exact causes of childlessness or even the type of 'infecundity', i.e. primary or secondary, thus making these data sources problematic from the point of view of understanding infertility in the country, let alone understanding trends that would require reliable data over time.

Little is known about the 'exact causes' of infertility in India. Reproductive tract infections and untreated sexually transmitted diseases are commonly held to be responsible for infertility, though systematic evidence is lacking. A high level of male factor infertility is now being acknowledged as an important contributory factor (some clinicians in India estimate over 45 per cent of infertility cases are male factor and in some regions of Gujarat where traditional tobacco chewing is endemic, male factor infertility is as high as 80 per cent). It is also widely accepted that genital tuberculosis is a major etiologic factor causing infertility in Indian women (Parikh et al.: 1997).

The presence of assisted conception in India is difficult to comment on because of the rapid expansion of these services. Gynaecologists and scientists are increasingly moving into this new, more lucrative and prestigious speciality area making the process of counting the number of clinics in operation a near impossibility. This research could locate over 60 established clinics (of which some 40 could be contacted; chapter 2) offering a range of services from in vitro fertilisation, embryo freezing to intracytoplasmic sperm injection (ICSI). According to my informants, most practitioners believe at least twice as many are in the process of being set up. In addition, with no regulatory mechanism in place to control the development, spread and application of these technologies in place, the resultant picture continues to be quite unclear.

This research is therefore positioned against the backdrop of a broader cross-cultural interest in infertility and a climate of lack of research into the presence of assisted conception technologies in the developing countries of the world. The present study is an attempt to critically evaluate the biological inability to procreate, its social unfolding and the culture-specific understanding of assisted conception technologies in India. Given the enormity of the task, the research has sought to isolate certain key facets of cultural responses to the vast and very complex reality of 'infertility management'. It is hoped the research findings will provide a point of departure for future engagements with infertility and its high-tech management in India.

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Technologies such as IVF routinely used to assist conception are 'not transferred into cultural voids...rather local considerations, be they cultural, social, economic or political, shape and sometimes curtail the way these western-generated technologies are

both offered to and received by non-western subjects' (Inhorn: forthcoming). In the Indian context this essentially translates into grappling with the complex notions of 'tradition' and 'modern'. It is an interesting thought that India today is standing at the confluence of western philosophical paradigms and its own perceived normative traditions. Anyone who has had a fairly sustained contact with the contemporary Hindu worldview would not be oblivious to its unique ability to have a continuous dialogue with its cultural past. The so-called 'western' and 'modern' in this worldview emerge embedded in the traditional, a process which connects the imagined past to the present and the present to an imagination of the future. Milton Singer tried to explain this as early as 1972, by arguing that:

> The traditionalism of Indian civilisation lies elsewhere - in its capacity to incorporate innovations into an expanding and changing structure of culture and society. This capacity is reflected in a series of adaptive mechanisms and processes for dealing with the novel, the foreign, the strange (Singer:1972, 385)

In this scheme, therefore, nothing is excluded, making cultural transformation less painful. Nuclear bombs become *Brahmastra,* the deadly weapon of *Brahma* the creator, aircrafts become the *pushpak vimana* (aircraft) on which the Hindu God and mythological hero *Rama* returned with his wife *Sita* after killing the demon *Ravana* thus ending his fourteen year exile, guided missiles become *Arjuna* and *Rama's* arrows that could perform tasks with lethal accuracy in the great wars of the epics *Mahabharata* and *Ramayana.* A close family friend once referred to *Vyasa's* rendition of the *Mahabharata* to the blind king *Dhritrashtra* miles away from the battle field in the city of *Hastinapur,* as an ancient form of live television broadcast, a phenomenon that has become an integral part of contemporary Indian culture. Ramanujan has likewise shown that the new ways of thought and behaviour do not replace, but live alongside older 'religious' ways. Thus he

goes on to assert that computers and typewriters receive *ayudhapuja* (worship of weapons) as weapons of war did once (Ramanujan: 1989, 57). Interestingly this cultural reasoning did not take long to assimilate issues like IVF and Surrogacy. Thus, an article entitled 'Sages knew the use of IVF' made an appearance in the English daily *The Statesman* of 16 January 1995.

I am not seeking to explain away these occurrences or to suggest that Hindus subscribe to a reasoning that compels them to reduce everything to an antediluvian past. On the contrary the continuous relationship with the past feeds into daily conversations, acts and attitudes towards the rapidly changing surroundings. There is never a conscious attempt to refer back to these sources but they do crop up in the act of explaining life and its complexities, a cultural process that is present in its apparent social absence. Marilyn Strathern in the preface to *Reproducing the Future* (1992b) lucidly alludes to how people everywhere express even the most general of thoughts in specific and particular forms by making their ideas available to one another through such forms, thus:

> As a consequence they are always borrowing, if only from themselves. It is this (cultural) facility that enables us to at once give shape to and provide ourselves with starting points for fresh thoughts (Strathern: 1992b, vii).

By drawing and borrowing from the past to make sense of the present, these cultural agents - in the examples above - are not trying to establish a truthful and objective narration of the past in relation to the present, but rather trying to take on board the 'other' in the image of the 'self', setting into motion the start of a new thought, a new cultural imagination.

This process of juxtaposing 'traditional self' with the 'modern other' is best understood in terms of what Das (1999) calls 'the double entrenchment of tradition in

India'. She argues that tradition is firstly entrenched in institutions that may be considered traditional (such as caste or religion) and secondly in institutions that may be considered modern (such as the bureaucracy and the law). She further argues that:

> An untainted traditional telos is as unavailable in contemporary Indian society as a modern institution, such as a law court, [to this we can now add IVF clinics: AB] which has not been coloured by its location. It is this double articulation which makes institutions such as caste or the religious community into new, original entities; this is not a matter of aggregation by which new features are added to old ones. When, for instance, Gandhi used *satyagraha* as a form of non-violent resistance to the British Raj, he transformed a traditional concept into a new concept (Das: 1999, 53).

This means that both the 'traditional' and the 'modern' are continually re-made, as traditions are reanimated to become new concepts; modern institutions in turn (when placed in the context of these 'sense making', 'meaning giving' improvisations with traditional concepts), stand coloured by virtue of their location.

The presence of biomedicine, encompassing assisted conception as a (bio)technological means of bypassing infertility, is a fine example of a modern institution in contemporary India 'coloured by its location'. The clinical engagement with infertility and that of the infertile with assisted conception, provides an insight into how people simultaneously inhabit several domains and move, extend and reconfigure ideas from these domains to create newer juxtaposed domains (traditional/modern) which allow for an imagination of the way 'things really are' (Strathern: 1992b). The foregoing invites attention to two main issues. Firstly, the traditional Hindu cosmological framework that produces beliefs and norms about human fertility/infertility and how these ideas produce the experience of stigma and social suffering in the face of infertility. Secondly, the modern institution of biomedicine, which is uniquely coloured by its existential location

in the wider context of Hindu traditions and whose selective transference enables clinicians and their patients to make sense of issues such as the success and failure of assisted conceptive techniques. In this respect, while part two and three of this thesis (see below) may appear to be straightforward renditions of institutions and the concepts of modern/secular and traditional respectively, part four sheds light on how seemingly modern and traditional entities permeate each other and produce a culture-specific engagement with assisted conception.

Though overtly crude and simplistic, this tripartite division nevertheless draws our attention to aspects of contemporary Indian reality which have an outward appearance of being modern (and even secular) but remain steeped in traditional concerns at different levels.[4] These traditional concerns, on the other hand, when viewed in the context of modern institutions, reanimate themselves as new concepts that have an outward appearance of being traditional (some may even argue primordial) but are curiously new ways of making sense of events within a specific cultural context.

Thesis Outline:

This thesis explores the experience of infertility and assisted conception in India. It tries to 'make sense', like the infertile and the clinicians in this study, of the way infertility and biomedical assistance structures and disrupts pursuit of the human goals of personal and social fulfilment. In the main the thesis seeks to explain how assisted conception, as a means of bypassing infertility, is being accommodated, understood and used in contemporary India. In so doing the attempt is to critically unravel the complexities underpinning these social processes. This has principally entailed situating the research in a number of diverse locales, such as the political economy of health in

India; the biomedical politics within the private sector; the mass media as a field for promoting and contesting assisted conception; ancient norms and ideas and their reverberation in the contemporary Hindu conceptual domain; and the importance of this cultural frame for producing stigma and making sense of assisted conception. Taken together, these locales unravel the complex nature of infertility and assisted conception in India.

The thesis is organised around four interconnected parts that, when taken together, make up a cultural account of assisted conception.

Part One, to which this chapter belongs, further contextualises the thesis in Chapter Two by discussing the methodological aspects of this research including the diverse primary sources I have used and by making some important conceptual clarifications.

Part Two of the thesis is essentially devoted to the politics of assisted conception in India. It views the private/commercial character of infertility clinics in relation to the wider public/private sector interaction with a view to understanding the broader biomedical politics of managing infertility clinics as successful private enterprises.

With the political economy of health in India as its backdrop, Chapter Three seeks to situate the emergence of assisted conception in the wider interaction of private and public sector health care in India i.e. the chapter views the emergence and spread of assisted conception as reflecting in microcosm the spread of private sector health care. Given that the spread of these technologies is restricted to the private sector, the chapter goes on to argue that this has pressurised clinicians into running their clinics at optimal levels as successful biomedical enterprises, especially in the face of what they perceive as

the constraints of operating out of a 'developing country'. More crucially, the strain to remain economically viable has fragmented the ranks of reproductive health care practitioners, which has in turn disrupted the crucial referral chain of patients.

Chapter Four examines the politics of conception by tracing the actual controversy surrounding claims and counter claims within the medical domain that appears to have emerged as a corollary of the rapid commercialisation of assisted conception in India. The chapter seeks to isolate an incident where scientists/clinicians can be seen as embroiled in a contest over ascription of proper credit on the issue of being the actual brain behind the first test-tube baby in India. The playing out of this contentious issue in the media is emphasised with a view to showing that the generation of scientific credibility and reward is produced and ascribed both inside and outside the scientific domain.

Dwelling on this theme further, Chapter Five shows how media narratives on assisted conception in India have assumed the form of a veritable 'institutional advertisement' and that promotion of medical expertise through media channels is far more pervasive than encountered in the specific case discussed in chapter 4. It is further argued that such media renditions produce a climate of misinformation, and even circumvent the code of good medical practice in India that forbids self-promotion of medical practitioners through media channels.

Part Three of the thesis examines the importance of human fertility in the Hindu worldview and how the lived, stigmatised experience of infertility can be a direct consequence of not fulfilling a cultural expectation of fertility.

Chapter Six slices into what is described as 'cultural conceptions'. The traditional understanding of infertility as it emerges from ancient texts is contextualised in the light

of emerging anthropological and sociological evidence from India pointing towards reinterpretation of traditional ideas, norms about fertility/infertility and their resonance in contemporary settings.

This framework foregrounds Chapter Seven, where the lived experience of infertility is examined by focusing on the entrenched stigma associated with an inability to procreate. The chapter is essentially an exposition of the socially debilitating stigma experienced by infertile couples and how they together manage and resist such pressures. In so arguing, the chapter proposes a rethinking of the conventional dualistic understanding of gendered response to social ostracism. In a culture where it is not uncommon for infertile wives to be abandoned by their husbands and their families, the data in this chapter provides evidence to the contrary that necessitates further research.

Part Four takes the thesis into the domain of seeking assisted conception and how both treatment seekers and practitioners make sense of conception technologies.

Chapter Eight explores the secret world of 'seeking conception'. The endeavour is primarily to understand how within the context of marriage and wider familial location couples pursue assisted conception and what strategies they deploy in making their fertility visual. The highly invisible and secretive nature of seeking out assisted conception is mainly grounded in the extent of normative conformity to the ideas of relatedness and biological connectedness perceived by these couples. The chapter tries to show how, by maintaining a shroud of secrecy, some individuals manage both the stigma and normative injuries to the perceived ideas of relation and connection by tacitly negotiating within the marriage or with select members of the family a silence that subsumes the normative transgressions within the kinship structures.

Chapter Nine deals with how treatment seekers make sense of their failed past and present encounters with biomedically assisted conception by examining the emotional and financial costs that they have had to endure. The chapter also includes the views of clinicians in order to understand how, from within the profession, charges of medical mismanagement are understood.

Chapter Ten speaks from a clinical site. The chapter focuses on the paradoxical nature of clinic/patient interaction that both reinforces high expectations and deepens the ambivalent feelings treatment seekers have about their past and present medical encounters. The chapter seeks to understand issues that the treatment seekers bring with them to the clinic and how the clinicians respond to them. In exploring this, several purportedly antithetical themes such as religion and science, altruism and commercial interests, resistance to clinical practice and an active interest in seeking it out, emerge as actively engaging with each other in making up the 'clinical experience of infertility'.

Chapter Eleven concludes the thesis with an overview and important questions for future research.

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Briefly, this thesis is an exercise in verbalising multiple sites that have hitherto remained unexamined. In the chapters that follow I will attempt to draw connections between these various 'sites' in which the experience and presence of infertility and assisted conception lie dispersed, to reveal a fragment of this complex and endlessly mutating picture.

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Notes

[1] Several feminists in the past have defined the technological intervention in human reproduction loosely around this theme. Stanworth (1987), for instance, isolated four separate technologies - technologies of fertility control, management of labour and childbirth, genetic enhancement, and bypassing infertility. Together, she argues, these interventions constitute 'reproductive technologies'. McNeil, however maintains that 'we must not lose sight of the connections either amongst the technologies or amongst women's experience of them' (McNeil et al.: 1990, 8-9). To prove her point she refers to Frances Price who showed that the use of ultrasonography has become not only a technology of antenatal care, but also of infertility treatment. Klein (1985) on the other hand described reproductive technologies as the full range of biomedical/technical interferences during the process of procreation, whether aimed at producing a child or preventing/terminating pregnancy. Spallone (1989) argued in the late eighties that the term 'new reproductive technologies is a recent one'. She places procedures like IVF, embryo transfer, sex selection genetic engineering of embryos, cloning etc. under the NRT label. These classifications are not without problems. Firstly, intervention like AID (artificial insemination by donor) is almost a hundred years old and is still included with the NRTs and, secondly, much of what was thought of as new reproductive technologies can no longer be properly termed 'new' (e.g. In-Vitro-Fertilisation). However the prefix 'new' is crucial in one important respect, in that medical interventions in the process of procreation draw attention to the cultural 'facts of life' brought into a 'new' context (Strathern: 1999). This means 'old' [or even conventional] ideas about relatedness and connectivity give way to 'new' possibilities of forging biological and social relations.

[2] For an overview of the feminist's critique of new reproductive technologies in the eighties see G. Kirkup and L.S. Keller (eds.). 1992. Inventing Women: Science, Technology and Gender, Cambridge: Polity. Press.

[3] References to these South Asian studies will be made, where appropriate, in the chapters which follow.

[4] Gupta (2000) goes a step beyond and alerts us of the 'mistaken modernity' in India by pointing out that, while there have been definite moves away from tradition in contemporary India, what ones sees is 'not yet modern'.

Chapter :2:
Conceptualising Conceptions: A Methodological Note

My first encounter with the word 'test-tube baby' dates back to 1986 when the Indian media heralded the birth of 'India's first scientifically documented test-tube baby' with much fanfare. I was still in junior high school and lived in a suburb of New Delhi with my family. For me the connection was instantaneous between the big news of the day and the cover of an old Time magazine gathering dust in my father's bookcase, which featured a large test-tube with a human foetus floating in translucent liquid. My friends from school and I were convinced that babies could now be made in glass tubes, a scientific possibility that fitted beautifully in our science fiction world of star wars. It was only twelve years later that I was to realise that whilst our teenage imagination had simplistically taken on board the possibility of making 'babies in tubes', in actual fact this imagination had percolated down much further. One of my interview respondents, for instance, recalled worrying times his family had had to endure on learning of their son and daughter-in law's decision to have a test-tube baby. It took nothing short of a visit to his hometown with his 'visibly' pregnant wife to allay his family's fears that the baby was not incubating in a large tube elsewhere.

My second and subsequent encounters with the world of the infertile and test-tube babies were not too dissimilar from 1986. The media attention, if anything, had become more persistent and by 1995 I had begun to contemplate researching assisted conception in contemporary India for a dissertation I was to write towards an MPhil degree at the Delhi School of Economics. The project, however, turned out to be too

ambitious and had to be deferred for another day. That day arrived when I started work on my PhD thesis at the University of Bristol. In what follows I present a description of how this research project evolved, the data that were collected and the methodology pursued, with a view to prefacing the arguments in the subsequent chapters.

The Beginning

This project had long been in the making and was critically shaped by a number of practical and substantive considerations. As alluded to above, my encounters with assisted conception for a considerable period of time were restricted to media accounts on infertility and test-tube babies. In fact, popular media accounts in India are the main source of public information on assisted conception. The test-tube baby phenomenon had received unprecedented mass media coverage through the late 1980s and the 1990s. My interest was particularly sustained by the presence of conception technologies and media accounts of infertility in a country whose population was steadily inching towards the one billion mark (a figure that India has now surpassed). I had envisaged this project to address certain 'core research issues' that possibly lay behind such media interest and what appeared to be a rapid spread of these very expensive technologies in a country where the basic health needs of millions are as yet unmet. These core research issues were, firstly, to examine the incidence of infertility in the country; secondly, the spread of these technologies in India; thirdly a rudimentary epidemiological profile of the causes behind infertility; and fourthly, why there was a sudden interest in infertility and assisted conception. On the face of it, the research questions were very basic and reasonable but the task of researching these issues (or for that matter any other) proved to be extremely difficult for one crucial reason: if I were to go ahead with this project, it would be first of its

kind in India. This made the research both exciting and insurmountably difficult. There was no literature on assisted conception in India that could be reviewed; there was no satisfactory national level data on reproductive morbidity or incidence of infertility; in the absence of any regulating bodies there was no way of estimating how many IVF clinics were in operation and there were no legal precedents in the country that could contain what appeared to be a sudden emergence of these technologies in the mid 1980s. The social science research in India – like that of western feminists – was in the main embarrassingly silent on the issue of infertility. A lengthy review of available sociological and anthropological literature on childbirth/reproductive health care and studies looking more directly at the status of women in India revealed only fleeting references to the stigma attached to childlessness. There were only two or three studies (cited earlier in chapter 1) that dealt with infertility and treatment seeking behaviour but nothing in relation to high-tech conception techniques such as IVF. Given these problems and my growing fascination with the presence of infertility and high-tech conception technologies in an over-populated developing country, I pressed ahead with drafting a survey that would not only provide answers to some 'core' questions but would also help bypass the lack of information on infertility.

The Research:

Before the start of fieldwork in India I had drawn up a detailed research plan covering issues that I imagined would provide some information on:

(a) The extent and causes of infertility and

(b) The extent to which assisted conception had spread in India.

This entailed collecting data of broadly four kinds:

1. A survey that would collect some rudimentary data on the geographical spread of these technologies, the type of clinics and the services they offered (such as

IVF, ICSI, embryo freezing etc.), the pregnancy and take-home baby rates of these clinics and the main causes of infertility. Since the information I was eliciting was of a sensitive nature the details on the clinic/clinician were left optional. The expectation was that by choosing to remain anonymous the clinicians would actively participate. Each survey schedule was accompanied with a printed self-addressed envelope.

2. Documentary sources were another crucial data source. These included government reports – if any – on reproductive morbidity, infertility, or any independent case studies on infertility by government or non-government organisations, medical personnel/clinician's own publications, documentation of media accounts – past and present, sociological/anthropological sources – once again if any – on infertility and assisted conception in India.
3. The most crucial source was primary interviews with treatment seekers and clinicians. To this end I had prepared a detailed but open-ended interview schedule to accommodate framing of questions on unforeseen themes that I may not have anticipated in advance.
4. I was also hoping to conduct some participant observation in the clinics though I did not have any selection criterion on what kind of clinic it would be or indeed how many. I decided to be practical and flexible about such considerations and decided to make these decisions 'on site', in the field.

With the start of the fieldwork in January 1997, my primary aim was to begin negotiating access to research sites and get the survey schedule out to as many clinics as possible. I had no idea what number of clinics to expect but a chance encounter with a regional medical representative of a drug company in Jaipur gave me access to

a valuable mailing list of some forty clinics spread across India. I could not have hoped for a better start.

The survey schedule however, evoked virtually no response. Only four clinics of the 40 contacted responded. This was extremely disappointing but, as I later found out, in no way unique. An earlier study relying on postal surveys to document IVF success rates in the UK and the Netherlands had shown that accurate data was not easily available and that half of the UK clinics and a third in the Netherlands were not willing to provide any information (deWit and Banta: 1990). In comparison, however, the response to my survey was simply dismal.

Out of sheer desperation to get hold of some 'hard data' on assisted conception I started personally to contact the more accessible clinics in cities like Delhi, Jaipur, Bombay, Madras, Bangalore and I mailed reminders to other clinics located on the east coast near West Bengal. I was now literally touring the country and individually contacting IVF clinics with the request for data and fieldwork access to clinics. The response was varied. While some clinics politely refused to be drawn into this research, others reassured me that the survey would be mailed in due course, whilst some pleaded their inability to provide the information due to paucity of time. The reluctance to provide information on IVF success rates and other related technologies was in part borne out of an absence of any regulating mechanisms like the Human Fertilisation and Embryology Authority (HFEA) and Voluntary Licensing Authority (VLA) in Britain. The clinics either did not maintain any records or simply 'constructed them' as some gynaecologists in Delhi informed me. One clinician even confessed that she had destroyed most of her past records for better income tax management since the tax authorities routinely harassed her by demanding access to patient records (to enumerate IVF cycles) to determine her total income per patient.

The clinician in question had instead put in place an ingenious system of selectively documenting the number of IVF cycles to reflect her income tax returns.

This exercise had an unanticipated 'knock-on effect' on the geographic spread of the research. In the absence of any independent sources of information to gauge where best to concentrate my efforts, I simply took every opportunity with which I was presented. In retrospect, I wish I had concentrated on fewer locales, like certain small scale studies in the west which have been very successful by keeping the focus on a restricted sample size (Ragoné: 1994, Edwards et al.: 1993, Franklin: 1997). Instead, persistent assurances from clinicians approached to respond to the survey – which incidentally remained mere assurances to the very end - kept widening the scope and spread of this research.

This significantly altered the face of my research. With the survey continuing to be in a state of utter disarray, I decided to focus on the other three key aspects of the research plan of talking to clinicians/ treatment seekers, locating myself in clinics to undertake some participant observation and get busy with documentary searches. To this end, the mass media in India emerged as an important site for examining the connection between the popular understandings and the actual practice of assisted conception. Another interesting feature that came to the fore was the virtual private sector monopoly over assisted conception. All the clinicians I was approaching were in private practice and this made the lack of governmental control or documentation of the take-up of assisted conception even more interesting. A careful reading of literature on public/private health care services in India later revealed that the development of assisted conception within the private sector was a feature of a much wider public/private sector symbiosis (chapter 3). Neither the connection between the wider Hindu conceptions about fertility/infertility, nor the lived experience of

infertility and assisted conception were to emerge very clearly before interviews with the clinicians and treatment seekers commenced. However, I was struck by the bold Hindu religious iconographic representations in the clinics. I subsequently incorporated this link between an individual clinician's faith and the practice of assisted conception in the research. The scope and scale of the research had clearly multiplied and scattered into various locales/domains and the connections were beginning to emerge from critically viewing the relation between these different sites.

The Present Study

The present study is a multi-sited research inhabiting and stringing together disparate sites. This has entailed stepping out of the methodological boundaries of sociology and actively coalescing emerging anthropological ethnographic practices and critical sociological (re)thinking on cultural representation. According to Marcus:

> [M]ulti-sited research is designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited logic of association or connection among sites that in fact defines the argument of the ethnography (Marcus: 1995, 105).

The main aim of such a multi-sited ethnographic study is not holistic representation or a portrayal of a totality, but rather an acknowledgement that the subject is dispersed across several different locales. Methodologically, therefore, the research follows a thread – albeit a bit tangled – connecting different 'sites' that both locate and animate the 'life worlds' of the infertile, their daily struggles and the clinical enterprise of assisting conception. In connecting these locales a connection of another kind is established, one masked by the use of generic term 'critical sociology,' which encapsulates an active engagement with feminist theory, anthropology, cultural and science studies, enmeshed into the account of the research to complement this multi-sited journey.

The mode of constructing this multi-sited ethnographic account can best be summed up in what Marcus alludes to as a process wherein an ethnographer's main aim is to 'follow the metaphor' (Marcus: 1995). Citing Emily Martin's (1994) work on immunity in America amongst others, Marcus argues that 'when the thing traced is within the realm of discourse and modes of thought, then the circulation of signs, symbols, and metaphors guides the design of ethnography' (Marcus: 1995). He further argues that such an approach involves the tracing of social correlates and grounding of associations that are at their most vocal and alive in language usage and print or visual media. In Marcus's estimation 'the most fully achieved multi-sited ethnography is in this mode'.

In understanding the presence of infertility and assisted conception in India, I have attempted to chart a similar route tracing the 'metaphor of conception' through multiple sites from ancient textual sources to modern technologies of procreation, infertile couples, their families and their engagement with clinical conception, medical practitioners and their representation in mass media, State policies on health and healthcare in the private sector. What emerges from this is a web of connections that together conjure a crucial part of the 'bigger picture' as yet submerged. Clearly, 'this gives the ethnography a fragmented character and invites further reflection on the picture of anthropology [and sociology] as it addresses the questions posed by new technologies' (Das: 2000, 284).

The Data Sites

This research was carried out over 16 months through 1997-98 and involved some fifteen thousand kilometers of travel within India. The duration of fieldwork was broadly divided into two phases. Phase one lasted from January 1997 to October 1998 and was followed by phase two that lasted another five months starting February 1998

and ending July 1998. Interspersed between these two phases was a brief stay in Bristol for a period of three months analyzing the emerging trends from the first phase and planning ahead for phase two. The time spent collecting data was crucial as every minute detail pertaining to infertility and assisted conception was personally 'hunted down' by myself and this involved extensive travel within India, which slowed down the process considerably. With the lack of success on the survey I was now working with three principal data 'sites':

1. *Primary Interviews*: These were collected through a series of in-depth semi structured and open-ended qualitative interviews with some 43 treatment-seeking individuals and 30 medical practitioners spread across 23 IVF clinics and research laboratories across six Indian cities namely, New Delhi in the North, Jaipur in the North-West, Bombay in the West, Salem, Bangalore and Madras in South India (more details below).
2. *Participant Observation*: This was mainly carried out in three clinics in Delhi, Jaipur and Bombay (more details below).
3. *Documentary/Textual Sources*: Another important data 'sites' in this research are the multi-media renditions of infertility and assisted conception, government and non-governmental documents/ reports, secondary data sources like sociological/ anthropological studies and ancient textual sources – mainly Epics and legal codes (more details below).

As noted earlier, the geographic spread of the clinics was a direct consequence of my efforts to get in touch personally with the maximum number of clinicians on my mailing list. Though I did not succeed in getting them to respond to my survey, I could interview them and their patients, and make observations at their clinics to varying degrees.

Before I explore the three data sites in detail, it is important to address the issue of access, centrally important to the process of data collection.

Encounters of a Clinical Kind: Gaining Access and other Adventures

M.N. Srinivas recently described himself as an 'oddball among anthropologists' since all of his fieldwork (it would be more appropriate to say his life's work) was carried out in his own country – India (Srinivas: 1997). The observation is interesting but at odds with the contemporary reality where increasingly rich insights into 'cultures' are coming from a growing tribe of 'indigenous ethnographers' (Fahim: 1982, Ohnuki-Tierney: 1984). As a newly initiated member of this tribe, I find Srinivas's contention that to study one's own culture is like studying the 'self-in-the-other and not a total other', echoing some aspects of my fieldwork experience (Srinivas: 1997, 22). The category of 'other' is in fact never fixed and its meaning shifts according to context (Thapar-Björkert: 1999). Hence, while I was an insider to the extent that I was born and brought up in India and could identify with my respondents at that level, I nevertheless, on occasions, faced the problem of being 'positioned as 'other' by my respondents because I was a researcher based in Britain' (Thapar-Björkert:1999, 65).

A lot of ink has been spilt on the issue of access and contacts in much of the sociological and anthropological writings on fieldwork (e.g. Whyte, 1981 an all time classic). However an armchair sociologist comes to appreciate the significance of these writings upon his or her return from the very first field trip. The experience of negotiating access for this research can broadly be divided into two heuristic domains, 'macro' and 'micro'. The purpose of 'macro' access was literally to establish a presence amongst the clinics and the 'community of clinicians' engaged in IVF and similar work. The primary aim of this process was to gain access through a vast network, and to use this opportunity to understand the complex nature of assisted conception itself. The

'micro' access, on the other hand, was the point of entry into specific sites of data collection, the clinics where I made observations, interviewed clinicians and their patients. There were moments when this distinction blurred, especially at public events like medical conferences where the main purpose behind my presence was to make further contacts, but nevertheless these occasions also provided some fascinating opportunities to make observations on aspects of assisted conception not usually on display in the individual clinics.

The Macro Encounters: Before the start of my fieldwork I was reasonably confident of negotiating access with minimum delays. In fact, long before I came to Bristol I had started to organise my research in my head. I had anticipated well in advance that the issue I was trying to deal with would not be easy to research, considering the general shroud of secrecy and lack of information. I had therefore started to approach doctors and government officials at the health ministry who could help me get a foothold. When the fieldwork began in January, I very quickly came to realise that there is no such thing as a 'good contact', and that a considerable amount of time and effort was required to cultivate people who can help. Some of the people I had identified earlier had either left or were transferred to other departments, others were too busy whereas some pleaded their inability to help, as they were no longer in touch with the individuals they thought they could ask me to see.

As a consequence, I spent a lot of time forging new friendships with the doctors and other specialists, which finally paved the way to my fieldwork. Another important theme to emerge from my fieldwork experience was that it is very seldom that one can arrange meetings or contacts months in advance of the actual start of the research. As I found out, it is keeping up constant face-to-face interaction with the people in question that eventually facilitates the access. One time meetings or polite

assurances and conversations over the telephone do little to help speed up the access, as given the pace of life people soon forget their commitments or simply use the long distance communication to avoid the researcher.

There were however, surprising sources of invaluable contacts that I could not possibly have anticipated in advance. Chance conversations with friends and relatives led to some very interesting material. On one occasion a close friend's reference helped me negotiate access in a prominent Delhi clinic. While 'good recommendations' were crucial to gaining access, being in constant circulation was equally important. Often one contact would snowball into another by way of further introductions to the friends and colleagues of infertility experts. Another source I found to be extremely useful was the Conference Circuit. Attending the various medical conferences on infertility and reproductive health in general not only put me in touch with some fascinating material on the medical perspective on infertility, but also with some of the leading medical experts in the field of fertility medicine. Often after these conferences, over cups of tea or lunch, or during dinner, much of my fieldwork access was negotiated. In one such major conference on infertility, in Delhi, I made some valuable contacts and managed to strike a very good rapport with the clinician who had organised the conference. It was with her that I recorded one of the most interesting interviews of my entire fieldwork. At the conference she walked up to me minutes before the start of the programme and asked me to speak on the issue of infertility bringing out the social and cultural aspects. Reluctantly I agreed though I was very nervous as one wrong [feminist] word in front of the assembled doctors would have jeopardised my entire field work, as all the prominent experts in the field – whom I was hoping to approach at the end of the conference – were present in the room.

Looking back, I am glad I agreed to speak that day, as the experience effected a fundamental departure in the way I was approaching the whole issue of 'engaging the field'. Immediately after I stopped speaking at this conference I was approached by couples and individuals who were undergoing treatment at the clinic and who were very appreciative of what I had said[1]. I was both touched and a bit confounded to hear that 'I exactly understood' how they feel about their infertility. I was having a hard time believing that I was surrounded by people experiencing infertility – in the medical and social senses of the word – telling me that I have encapsulated years of misery and pain in a few words. However, it soon became apparent that it was not a sign of my brilliant insight into their 'infertile worlds' but rather more importantly a feature of the continuing absence of any possibility of sympathetic dialogue on the subject. The bottom line was, as one woman put it, 'nobody talked about it'. It was precisely at that moment that I realised that none of my scheming approaches to gaining access to 'material' was the way forward. The only way forward was to engage with people – clinicians and their infertile patients – and let them openly and honestly know how desirous I was to participate in their world of infertility and assisted conception. The way forward was to simply talk about infertility, to enter the silent zone of infertility and assisted conception together with the afflicted individuals and their clinicians. However the practical reality of such an approach was a lot more complicated, since in order to get to the infertile treatment seekers, I had to first get past the 'gatekeepers': the clinicians.

The Micro Encounters: Access to the actual data site is often controlled by gatekeepers (Burgess: 1991, Lofland and Lofland: 1995). While all of the 23 clinicians approached could eventually be interviewed the access to clinics and patients was severely restricted. Securing conditional or even partial access is not an entirely unknown

research experience (Burgess: 1984). In this case, however, out of 23 clinics approached only one clinic each in the cities of Jaipur, Delhi and Bombay granted me access to their patients to hold interviews, and of these only two clinics (Jaipur and Delhi) allowed me to participate in the day-to-day working of the clinics. Access to doctor/patient consultations was further restricted as only the Delhi clinic agreed to my presence in the consultations. What was even more problematic was that all three clinics had set arbitrary limits on the duration of my stay. Jaipur agreed for ten days, which I could extend by a further five days, while the clinics in Bombay and Delhi each agreed to two weeks. The only way around this restriction was to break up the time spent in these clinics between phases one and two of the research. By having a gap I could 're-enter' the clinic for another couple of weeks. This strategy worked particularly well in Bombay where a gap between two spells enabled me to 'extend time'.

Clinicians mainly gave me two sets of reasons for not allowing access to their clinics and patients: firstly, disruption to their daily routine, and secondly patient confidentiality. On the other hand, the clinics that did grant me access but had set arbitrary limits on my stay gave me similar 'disruption to daily routine' explanations for the restrictions imposed. Within the clinic itself, apart from the one in Jaipur, I was not allowed to approach the 'patients' with interview requests. In Bombay, I was given a separate room within the clinic to conduct interviews. I did not have free access to patients, though in consultations, the clinician broached the issue with 'patients', by saying that 'a visiting researcher interested in understanding the experience of infertility would like to speak to you'. This proved to be a formal filtering process as patients either outright refused – of these the most notable were three women who took exception to being interviewed by a man – or agreed to be interviewed, on the understanding that they had the freedom to terminate the interview at any stage should

they feel uncomfortable. In the Delhi clinic, once again, I was given restricted access to the treatment seekers. The clinician asked her patients if they wanted to be interviewed but there was no way of telling if there was any selection criterion used by these clinicians to approach specific individuals, or whether patients were sent to me at random depending on how they felt about being interviewed. At Jaipur the clinician had given me free access to his patients. This meant I could approach couples and individuals with the interview request. There are repeated expressions of embarrassment in my field notes on not knowing what to do or how to approach the couples and explain to them the real intent behind my need to discuss their pain of infertility. The process of 'breaking the silence' is always a touch intimidating. With infertility and its experience freezing in a cold silence for most couples, it was only expected that the task of thawing the freeze by speech would entail a degree of discomfiture that neither of us were mentally and emotionally prepared for.

Primary Interviews: Clinicians and Treatment Seekers

A total of 23 IVF clinics were personally contacted. These clinics were spread across five cities as follows:

Cities	Bombay	Madras	Delhi	Bangalore	Jaipur
Clinics	7	7	5	3	1

In addition seven other medical personnel were interviewed. Of these, two were scientists at the Institute of Research in Reproduction (IRR), Bombay, two were pathologists running sperm banks in Bombay and Delhi respectively, and three were gynecologists specializing in infertility: two in Delhi and another in Jaipur.

Med P.	Scientists	Pathologists	Gynaecologists	Clinicians
No.	2	2	3	23

A total of 30 medical personnel were interviewed, of whom 76 per cent were assisted conception practitioners, 10 per cent were gynaecologists, approximately 6.6 per cent scientists and pathologists. The twenty clinicians who agreed to be interviewed (but did not give access to their clinics) were adept – to a greater or lesser degree – at answering questions, as quite a few of them were routinely interviewed by various media channels. On many occasions I could get very frank and candid interviews from them, though none could provide any evidence on the extent to which these technologies had penetrated in India. It emerged from their responses that assisted conception was mainly a private sector initiative and there was no way of estimating who, would set up or extend an existing gynaecological practice to include conception technologies or when and where. The scientists at IRR were interviewed with the very specific purpose of unearthing the complex IVF related developments in the public sector. The pathologists and the gynaecologists were approached to get a perspective from professionals who not only dealt with infertility on a daily basis but were also ancillary to the wider practice of assisted conception.[2]

The treatment seekers on the other hand were interviewed in two phases. Phase one in 1997 concentrated on the clinics in Jaipur and Bombay. The following interviews were conducted in the Jaipur clinic:

Jaipur, Rajasthan (North West India) 1997

Serial No.	Interviewee	Married since	In Treatment since	Type of Family	Religion
1	Couple	1990	1994	Joint	Hindu
2	Couple	1974	1981	Joint	Hindu
3	Husband	1980	1996	Joint	Hindu
4	Wife	1990	1991	Joint	Hindu
5	Couple	1989	1995	Nuclear	Hindu
6	Husband	?	?	Nuclear	Hindu
7	Husband	1986	?	Joint	Hindu
8	Couple	1986	1987	Joint	Hindu
9	Woman with Sister-in-Law	1987	1988	Joint	Hindu
10	Couple	1989	1990	Joint	Hindu
11	Couple	1990	1990	Nuclear	Hindu
12	Couple	1984	1986	Joint	Hindu
13	Mother & Son	1995	1995	Joint	Hindu
14	Wife	1993	1994	Nuclear	Hindu
15	Husband	1984	1986	Joint	Hindu
16	Wife	1983	1993	Joint	Hindu
Total: 16 Cases	Total: 25 Persons	-	-	Total: 12 Joint & 4 Nuclear	All Hindus

The data from Jaipur shows that 43.75 per cent [7] of the interviewees were couples, as against 56.25 per cent [9] individuals or individuals accompanied by a family member. Of these respondents, a high proportion (75 per cent [12]) lived in joint families, while 25 per cent [4] of the respondents were from nuclear families. All respondents were married and Hindus. The profile of the Bombay interviews is as follows:

Bombay, Maharashtra (West India) 1997

Serial No.	Interviewee	Married since	In Treatment since	Type of Family	Religion
1	Wife	1989	1990	Joint	Hindu
2	Couple	1993	1995	Joint	Hindu
3	Couple	1989	1991	Joint	Hindu
4	Wife	1991	1992	Nuclear	Hindu
5	Couple	1986	1988	Nuclear	Hindu
6	Couple	1977	1978	Nuclear	Hindu
7	Couple	1979	1983	Joint	Hindu
8	Couple	1990	1992	Joint	Hindu
9	Husband	?	?	Joint	Hindu
10	Couple	?	?	Joint	Hindu
11	Wife	1998	1990	Nuclear	Hindu
12	Husband	1984	1986	Nuclear	Hindu
13	Couple	1983	1988	Joint	Hindu
14	Wife	1985	1989	Nuclear	Hindu
15	Husband	1989	1991	Joint	Hindu
16	Husband	?	?	Nuclear	Hindu
17	Wife	1989	1990	Nuclear	Hindu
18	Wife	1992	1995	Nuclear	Hindu
19	Husband	1987	1995	Joint	Hindu
Total: 19 cases	Total: 27 individuals	-	-	Total: 10 Joint & 9 Nuclear	All Hindus

In Bombay, 57.89 per cent of respondents were individuals, and 42.10 per cent were couples. Of these, 52.63 per cent were living in joint families and 47.36 per cent in nuclear families. All couples are married and Hindus.

The second phase of research in 1998 focused on Delhi and Bombay clinics:

Delhi (North India) 1998

Serial No.	Interviewee	Married since	In Treatment since	Type of Family	Religion
1	Couple	1994	1996	Nuclear	Hindu
2	Couple	1992	1993	Joint	Hindu
3	Couple	1996	1998	Joint	Hindu
4	Couple	1989	1990	Joint	Hindu
Total: 4 Cases	Total: 8 Persons	X	X	Total: 3 Joint & 1 Nuclear	All Hindus

All respondents in the Delhi clinic were couples, married and Hindu. An overwhelming 75 per cent [3] lived in joint families.

The data from the Bombay clinic is as follows:

Bombay, Maharashtra (West India) 1998

Serial No.	Interviewee	Married since	In Treatment since	Type of Family	Religion
1	Husband	1991	1991	Joint	Hindu
2	Husband	1980	1982	Nuclear	Hindu
3	Husband	1984	1986	Nuclear	Hindu
4	Couple	1986	1989	Nuclear	Hindu
Total: 4 Cases	Total: 5 Persons	X	X	Total: 1 Joint & 3 Nuclear	All Hindus

By contrast with the respondents in Delhi, interviewees in Bombay were 75 per cent [3] individuals and the family composition was 75 per cent [3] nuclear.

The data above reveals some general information about the treatment seekers, i.e. total cases (couples/individuals) [N=43]. The distribution of interviewees shows that in an overall 46.5 per cent of cases, respondents were interviewed together as couples, while 27.9 per cent of husbands and 20.9 per cent of wives were interviewed separately from their partners. A further 4.7 per cent of respondents were interviewed with an accompanying family member. The average duration of marriage in the sample is 10 years [mean:- 9.9487] with a range distribution of 21 years separating the maximum [23] and minimum [2] limits. This becomes significant if we examine the number of

years these couples had been in treatment. The average duration of years in treatment is over 7 years [mean:- 7.1053] with a range of 19 years of treatment seeking. This means that out of an average married duration of 10 years the interviewees had spent on average 7 years in treatment. These figures can be examined still further in relation to the family background. A high percentage (60.5) of the respondents described their family arrangement as 'joint' whilst 39.5 per cent described themselves as living in a nuclear family. Respondents from nuclear families spent an average of 8 years in treatment [mean:- 7.9333] with a range distribution of 17 years. As against this respondents with joint family background were in treatment for an average of 6 years [mean:- 6.5652] with a 16 year range distribution. Individuals from nuclear backgrounds appear to fare marginally better than joint in terms of years spent seeking treatment. It is also significant that all respondents were Hindus.

The research process essentially entailed semi-structured open-ended interviews with individuals and couples at three IVF clinics. The clinicians and other medical personnel were interviewed at length, and once again the interview questions were open-ended to allow further discussion. Similarly, interviews with the directors of two Bombay-based adoption agencies were also recorded. With the exception of two interviews with research scientists on the sensitive topic of the politics of conception (explored in chapter 4), all semi-structured interviews were tape recorded and later transcribed. The names of the (treatment seeking) interviewees (where available) and clinicians/scientists have been replaced by pseudonyms to maintain confidentiality. There is, though, one exception: while following the media reports and debates no attempt has been made to conceal identities as the names were already present in the public domain. Interviews with the treatment seekers were conducted in English [19] 43.18 per cent of the time as against in Hindi [25] 56.81 per cent of the time. Clinicians

and scientists on the other hand were all interviewed in English. The Hindi interviews were translated and transcribed in English by myself, though some of the grammatical and syntactical structures posed great difficulty (Ercikan: 1998). In all such cases I have carried out an approximate translation to correspond with the broader meaning being conveyed.

Since access was limited, I had no choice but to interview cases as and when I could. There was therefore no conscious attempt to interview individuals separately, as couples, husbands or wives (however much this might have been desirable, for example to avoid a bias arising from gender inequity in relationships), yet due to the sensitive nature of research and problems of access it was not always possible to interview the couples together. On many occasions women either came alone to the clinic whilst their husbands were at work or only husbands could be interviewed, as their wives were either undergoing a sonogram or an embryo transfer.

The process of interviewing was, in most cases, less than ideal, as the couples could only be approached in the clinics. As a consequence of this, the possibility of follow-up interviews was minimized considerably, since a great many of these couples were making their way to the clinics under very difficult personal circumstances (financial, familial pressure, IVF cycle bound visits, infrequent visits on account of distance and accessibility etc.). Additionally, over 60 per cent of the interviewed treatment seekers were living in joint families and this made negotiating interviews outside the clinic even more difficult. Though on occasions I was drawn into some couples' personal struggles with their infertility treatment (details in chapter 9), the interviewees were on the whole extremely reticent in yielding information on certain aspects. This raises the complex issue of what constitutes private as against public in a research exploring human struggles with potentially stigmatizing conditions. It became

clear from this experience that while there is no fixed private sphere (Day: 1985 in Lee 1999), topics and activities regarded as private vary cross-culturally and situationally (Lee: 1999). Within the sample of interviewees the responses varied greatly to questions that I viewed as potentially unproblematic. The majority of the interviewees were not prepared to share any personal details like names, class background or even employment/income profile. Repeated probing in casual conversations before and sometimes during the interviews could not elicit any concrete information on the economic circumstances of the interviewees. The most common form of resistance encountered was either a long silence or an ambiguous reply. This is not an uncommon experience for researchers dealing with sensitive topics especially in situations were the respondents feel a certain element of unease when asked questions directed towards their finances or sexual behaviour (Goyder: 1987 in Lee: 1999). Cornwell (1984) argues the case for repeat interviews to get beyond 'public' accounts to discover 'private' ones, but as I have shown this option was not open to me. McKevitt (2000), however, has argued that while some open-ended interviews can yield accounts that are narratives, others do not. Drawing on his own research experience amongst elderly stroke patients, McKevitt found that while some respondents in his interview transcripts came across as engaging and producing narratives on their experience at length, others were reluctant to take on the role of narrator and responded to the questions with brief answers, resisted the probing questions with smiles and silences.

Silences, or the 'refusal to narrate,' and the absence of information/data such a refusal produces is in itself significant. The individuals who were openly sharing information on their class and economic backgrounds were either very well-to-do, or at least middle class professionals, working and living in metropolitan cities. The respondents (all eight) in phase two (1998) of this research fall into this category while

only four interviewees in the 1997 sample for Jaipur and Bombay gave definite indications on their economic backgrounds. The remainder of respondents were putting themselves through some degree of financial hardship to fund their quest for conception. I could only get fleeting references on financial hardship in some cases, whereas I obtained graphic accounts of financial drain in others, but no systematic data on socio-economic background could be collected. This was both intriguing and unexpected, for on the face of it the query seemed fairly unproblematic when compared to some of the more painful aspects of stigma and ostracism the respondents were sharing.

A hindsight reflection appears to suggest that the resistance offered in sharing their financial circumstances was after all not so unusual. With very sound reasoning the respondents were holding back information that could in principle effect their treatment. These individuals were clearly viewing me as part of the clinic setup and hence were entirely justified in concealing any information that they viewed could reflect on their ability to pay for the treatment. The fact that either a clinician was sending them to me to be interviewed or I was free to approach them doubly entrenched my presence in the clinic as someone close to the clinician. On more than five different occasions the interviewees proceeded to show me their past medical reports and despite my persistent attempts to explain my non-medical sociological background these interviewees could not disassociate me from the clinic. This also explains the narrations of financial hardships and horrific past medical interventions alongside complimentary renditions vis-à-vis their encounter with the clinic where these interviews were conducted (chapter 9 and 10). I am not suggesting that a deliberate attempt was made by the interviewees to conceal the truth, but I do feel they strategically managed the situation by being selective in their responses. This, in principle, gave the respondents room to manoeuvre their difficult financial circumstances to get concessions towards the costs of the treatment

(see chapter 10). This also raises the important methodological question whether interview responses should be treated as providing access to the actual experience or whether these responses are actively constructed narratives (Silverman: 1993, Holstein and Gubrium: 1995, Silverman: 2000). In the present case, the responses lie at the cusp of experience and strategically managed narratives. One may even say the narratives are intimately shaped by the experience of infertility, stigma, financial drain and a long emotionally exhausting wait for conception.

Given these difficulties, only an overarching range of treatment seekers from different backgrounds could be identified. Individuals and couples interviewed ranged from the wife of an industrialist in Bombay to a farmer from a village in Punjab. Taken together these respondents do not make up a composite class or social group, though this is sociologically significant as they are a group in themselves by the virtue of their inability to biologically reproduce. Through the course of these interviews information on the familial composition (whether joint or nuclear), marital status and time spent in treatment emerged quite clearly. The fact that all the respondents and clinicians were Hindus did surprise me at first though given the predominant Hindu majority in India it was not so unique after all. Therefore, while there was no conscious attempt to include only Hindu respondents, the fact that there were only Hindus in my sample meant that religion did get incorporated in the research as a centrally important theme. At one level this was an unexpected and unanticipated turn of events and I could only seek solace in Fine's contention that 'good ethnographers do not know what they are looking for until they have found it' (Fine: 1993 cited in Irvine: 1998, 170).

The process of interviewing was congenial once the 'breaking the ice' phase, which entailed long conversations about politics, popular culture and the like, was out of the way. As a male researcher I was aware of the constraints I was placing myself under

in attempting to interview women on an intimate and a very painful subject. Women did vocally participate, however, once they decided to be interviewed. With the exception of three women who outright rejected being interviewed by a man, all the rest vocally engaged in in-depth discussions of their experiences of infertility and medical treatment. The constraints imposed by the 'conjugal setting' on the interview process, on the other hand, are difficult to predict (Hirsch: 1999), especially given that the location of these interviews were confined to the clinics. Additionally in some cases the couples were extremely nervous and anxious talking to a stranger on the subject of their infertility, an anxiety accentuated by the fear of being found out or talked about in the press. The following entry – 13 May 1997 - in my field notes is telling:

> I met the wife first in the presence of the doctor. She was concerned whether her name or identity would be disclosed. "We are still quite young", she said to me [husband 26 and wife 23] "we don't want this getting published or talked about in the press. Nobody knows except my parents and my husband's parents and we'd like to keep it that way".

Some other couples were even more reluctant to be interviewed since they were seeking treatment without the knowledge of their families (see chapter 8). The process however became more engrossing once I began to step out of the confines of interview-based interactions.

'A Life in the Day of a Clinic': Participant Observation

Many lives are touched by the clinical encounter on a 'typical day'. In this respect clinical encounters are much more than a mere day in the life of an infertile person, for it is in these visits that treatment seekers bring with them to the clinics a whole gamut of everyday experiences of 'living infertility', which for many is 'life itself'.

In three clinics in particular - one each in Delhi and Rajasthan in North of India and the other in Bombay - I was able to participate on a limited scale in the daily 'life

world' of the clinics and their day-to-day dealings with the infertile. I was aware that while 'observation shows us everyday life being brought into being...it does not show us what is real...' (Dingwall: 1997, 61), though it is equally true that 'observation produces...great rigor when combined with other methods' (Albas and Albas: 1998). I was also aware of the problems in positioning myself in the 'classic participant-observer role' as I did not wish to approach the so-called data collection from the perspective of privileged outsider, the disinterested, disengaged onlooker. The concern was not borne out of any methodological commitments or notions of political correctness or even a disciplinary allegiance to the politics of 'writing cultures' thesis, but rather out of a sense of wanting to be a part of 'what I saw' and 'how I understood what I saw'. I therefore decided to quietly spend time at these clinics absorbing the daily activities, the mundane coming and going of patients and their interactions with the clinical world. This usually entailed 'hanging out' (Dingwall: 1997) in the clinic lobbies. This approach also brought out into the open an ethical dilemma of indulging in covert as against overt research (Van Maanen: 1988, Goode: 1996). In only three clinics were the gatekeepers (clinicians) aware of my research interests and I had permission to take notes on my general observations. In other clinics where I was only allowed interviews with the clinicians – often after a very long wait in the clinic lobbies – I took notes, while waiting, on various themes in the waiting areas and the interaction between the patients and clinic bureaucracy. There were parts of the clinic that were out of bounds. In all the three clinics my access to the laboratory area was severely restricted due to fears of contamination, though on one occasion I was given a tour of the 'sanctum sanctorum' of the Jaipur clinic where 'life itself was created,' in a sterilized suit. I was also given very limited access to patient's confidential correspondence files at this clinic. However,

unlike some other researchers, who participated in the daily life of IVF clinics, I was not given any official role or title. Cussins's experience is interesting in this respect:

> On the first day of my fieldwork the director, Dr. T., hastily greeted me, and, with no further ado, dispatched his nurse to find a white coat that would fit me. Once enrobed, I was informed that my title was to be "Dr. Cussins, a visiting scientist", and from then on that is how I was introduced to patients (Cussins: 1998b, 69).

It is just as well that I was not given such a formal title and position in the clinics where I observed, as it would have only reinforced the connections that my interviewees were drawing between the clinic and myself.

I also had the rare opportunity of sitting in on doctor patient consultations at one clinic with the express permission of the individuals – doctors, clinical staff and patients – involved. The experience was truly enriching for it gave a unique glimpse into the social unfolding of infertility in a medical setting. I simply sat through these sessions in a corner and took verbatim notes on the consultations. This helped tremendously to literally recede my presence in the background while causing minimal obstruction to the actual interaction. For the treatment seekers I was someone bent over a notebook taking down the details of the consultations. In most cases I proceeded subsequently to interview the couple/individual and took that opportunity to reintroduce my research and answer any questions on what I was going to do with the material collected.

The Textual Site: Documentary and Textual Sources:

Approaching 'media as text' allows an interplay between both print and electronic sources. Mainly the data is sourced from newspaper dailies, popular magazines, television reports, documentaries, talk-shows and serialized-programmes. There is very limited use of government reports and documents mainly because an 'official response' to assisted conception is still under formulation.

The research also draws (chapter 6 in particular) extensively on English translations of the 'ancient texts' like the *Mahabharata* and the *Dhrmashastras*, which significantly includes the *Manu Smriti*, and other codes of law like the *Narada*, *Brihaspati*, *Vishnu* and *Gautama*, *Apastamba, Vasishtha* etc. that have come to be assimilated under the general rubric of Hinduism. Chapter 6 uses Meyer's English translations of the *Mahabharata* and selectively draws on the translated text. This selective approach is important in the light of Chakravarti and Roy's (1988) critique of the lack of analytical rigour in pre-independence scholarship on ancient texts. According to the authors:

> Thus, while Meyer is aware of the varna bias of his sources (1952: 151,169) and its possible implications, he does not even seem to be aware of the existence of an inbuilt gender bias in the same (Chakravarti and Roy:1988).

Due to this problematic aspect, the chapter has distanced itself from Meyer's analysis and has focused instead on the rich body of translations of the epic. Similarly the chapter draws on English translations of ancient legal texts from Max Muller's Sacred Books of the East series.[3] However there is an uncomfortable awareness of the possibility that in these 'pre-independence translations' of ancient texts:

> ...from Sanskrit into English, where religious concepts were frequently used the translation often reflected a Christian undertone (Thapar:1989, 218).

Reference to the *Manu Smriti* also deserves a brief mention. It is essential to note that:

> The East India Company's interest in locating and codifying Hindu law gave a legal form to what was essentially social observance and customary law. The concept of law required that it be defined as a cohesive ideological code. The Manu *Dharmasastra*, for example, which was basically part of Brahmanical *smrti* was taken as the law of the Hindus and presumed to apply universally (Thapar: 1989, 218).

Uberoi similarly argues that legal codes in British India were constructions derived from Sir Henry Maine's reading of classical Roman law in the light of *Dharmasastric* texts

and nineteenth century British observations on Indian customary law (Uberoi: 1996, 186, 1993). In this sense it becomes essential to focus on the 'laws' of *Manu* because the discourse on personal law that was set into motion by the British still resonates with contemporary socio-legal thinking, spilling into the contentious issue of a common code of law for various Indian communities.

Another 'textual site' integral to this research is a large body of social scientific literature. At this stage, however, I wish to discuss this only in relation to certain conceptual clarifications that are left unstated in most sociological accounts of India, namely a critical reflection on the constructed nature of categories like 'India' and 'Hindu'. This is crucial, especially in the light of growing scholarly debates on the perils of a simplistic reading of these terms.

Inden, in his critique of the indological branch of orientalist discourse on India, has shown how the scholarly writing accomplished the building of a theory of a world ordered in a natural and stable way by constructing essences into its metaphors (Inden: 1992, 1-2). According to Inden, essentialism is:

> the idea that humans and human institutions, for example, the 'individual' and the 'nation-state', are governed by determinate natures that inhere in them in the same way that they are supposed to inhere in the entities of the natural world (Inden: 1992, 2).

In contra-distinction to this view, Inden proposes a theory of 'human agency' which constructs agents as 'complex and shifting', endowed with the ability to 'make and remake' one another through a dialectical process in changing situations (Inden: 1992, 2)[4]. Inden's main contribution lies in problematising the empiricist tendency to discredit the Indian agency to make their world and, instead, ascribe it to the makers of orientalist discourses and to the supposed essences of the Indian/Hindu mind which, in turn, justified the civilising mission of the white European 'selves' towards

the coloured Indian 'others'. Inden's argument is an important addition to a growing body of scholarship critical of the orientalist and empiricist tendencies inherent in both historical and social-anthropological writings in academia (Clifford and Marcus: 1986, Asad: 1986, Said: 1995). Inden, however, makes one important oversight. In his over-enthusiasm to ascribe agency to the 'native', he uncritically draws on terms such as 'Indian'. If one examines his following assertions this becomes most explicit:

> I wish to make possible studies of 'ancient' India that would restore the agency that those histories have stripped from its people and institutions.

Similarly,

> My main argument, then, is that the agency of Indians, the capacity of Indians to make their world, has been displaced in those knowledges on to other agents...(Inden: 1992, 1, 5).

Inden is very clear about the existence of an entity – Indian - which was denied the agency of constructing their world by the scientists conforming to the orientalist branch of scholarship. This is a recurring problem in writings on things 'Indian'. There is a tendency to not only take 'Indian' to mean a body of people who have historically populated the south Asian subcontinent but also to equate Indian to Hindu and use the two terms congruously. Thus the two terms - Hindu/Indian - are made primordial and timeless in most scholarly accounts, a fallacy not entirely unknown to both popular and journalistic discourses on the subject. If Inden deploys the term Indian to mean a nation state in the sense Gellner (1983) ascribes meaning to the term, then the Indian nation state is not very old to take care of the range of historical and political issues that Inden seeks to problematise as products of Indian human agency. If, on the other hand, the usage of the term Indian is taken to mean India as historically a nation but an unexpressed state, then one runs into similar problems where historical complexities point to the emergence of Hindu and Indian as

contested entities and not as timeless primordial objects. This, then, is the 'Orientalist trap' that writings old and new on India find hard to escape. An overt tendency to ascribe agency to categories without understanding their constructed nature, whether they be the colonial anthropologist or as in the case of Inden the native Indians as agents of their own destiny. Little or no attempt is made in such accounts to understand how categories like the Indian or the Hindu come into being and are understood. The problem with a reflexive usage of established terms to analyse the histories of cultural agents - who may or may not be responsible for the contemporary taken-for-grantedness of these terms - poses precisely the problem Inden, in calling the agents from the past by their present name – Indian - has run into.

In addition there is a common tendency to correspond India to Hindu. Stietencorn's (1991) explanation about the confusion this dual usage of Hindu/India has produced is particularly revealing:

> The word (Hindu) is the Persian variant of Sanskrit *sindhu*, the Indus river, a word applied already in the Avesta both to the river and to the country through which the Indus flows. In the plural, it denotes the population living in that region: the Indus people, the Indians. This meaning is attested in Old Persian cuneiform inscription from the time of Darius I who expanded his realm to the Indus in 517 B.C. For more than 1000 years the word Hindu (plural) continued to denote the Indians in general. But when, from 712 A.D. onwards, Muslims began to settle permanently in the Indus valley and made converts among low caste Hindus, Persian authors distinguished between Hindus and Muslims in India: Hindus were Indians other than Muslim. We know that Persian scholars were able to distinguish a number of religions among the Hindus. But when Europeans started to use the term Hindoo, they applied the term to the non-Muslim masses of India without those scholarly differentiations. Most people failed to realise that the term "Hindu" corresponded exactly to their own word "Indian" which is derived, like the name "India", from the same Indus river, the indos of the Greek (Stieteneron: 1991, 12).

Whatever the complex historical circumstances may have been, one thing is clear: that the term Hindu and Indian were external categories, they were 'othering' devices. The

people on whom these labels were put did not differentiate themselves as 'Hindus' or 'Indians'. The term Hindu was simply assimilated and transformed over a long period of time, whereas India assumed its present day popular usage with the arrival of Europeans.

The terms such as Hindu and India are used in this thesis in the clear knowledge that they are not timeless or primordial categories against which an alien Western technological 'invasion' can be propped up. Consequently, while referring to classical texts in this thesis, a conscious attempt is made to resist labelling them as 'ancient Indian texts'. Likewise, the term Hindu is deployed here to refer to a body of cultural agents in the full knowledge that the term has been transformed in several crucial respects by the these agents who have invested the term with a range of cultural meanings. However the term 'Hindu' in most scholarly accounts is used as a 'retrospective category,' without taking into account the transformation it has undergone and without appreciating the ongoing process of its reconstitution (most notably in the Hindu right wing political discourse). A 'retrospective mode,' therefore, enables such accounts to speak of agents from the past in terms of present variants of the category (Hindu) that had no corresponding analogues in the documented histories of these cultural agents. In its contemporary usage the term Hindu can at best be looked at as encompassing and modifying several disparate strands ranging from *Vedic* philosophy to *Puranic* and *Bhakti* influences (Thapar: 1989, Sontheimer and Kulke: 1991). In the context of Das's argument in chapter 1, this amounts to acknowledging a continuous reanimation of tradition and modernity or rather a continuous way of (re)making and (re)moulding traditional concepts (Hindus) and modern institutions (Indian State) that sustains a continuity with an imagination of traditional self. When I refer to the Hindu cosmology or worldview in

this thesis or to the Indian nation, it is to this modified and transforming face of Hindu/India that I am alluding.

Conclusion

The 'post-writing cultures' social research has to contend with the idea that 'ethnographic truths are inherently *partial* – committed and incomplete' (Clifford and Marcus: 1986, 7). The genre of authoritative truthful accounts is dead. In the Indian context this has meant that, unlike the 'social scientists who came into the world of knowledge as part of the anti-colonial, nationalist enterprise, the new generation of social scientists in India have to live with a destruction of certainty as the only condition for the production of knowledge about Indian society' (Das: 1999, 54). As Das contends, they, the social scientists, cannot represent India as if India were absent and silent, but rather can only insert their voice within a plurality of voices. This thesis is a small step in this direction - an account of infertility and assisted conception in India that has remained un-verbalized within the discipline of sociology. In undertaking this research I have attempted to provide no more than a point of departure for similar endeavours in the future. In this chapter more particularly I have laid out my experiences and the methodological trope deployed in 'writing', 'understanding' and 'explaining' the world of the infertile, and their tryst with medically assisted conception. This is in no way the only approach and it is hoped that future research in this area will explore different sites from different epistemic locations.

Notes

[1] These couples were invited to the conference to participate in an interactive session to voice their concerns and the social experience of being infertile.

[2] I could, on limited scale, interact with some medical representatives of different pharmaceutical companies. Whilst this gave a fascinating insight into their world of commercial transactions with the clinics, in the absence of any hard evidence I decided against this aspect in the research (see chapter 11).

[3] Müller, F. M., 1894. The Sacred Books of the East: Translated by Various Oriental Scholars and Edited by F. Max Müller, Vols. I to XLIX, Oxford: Clarendon Press.

[4]According to Inden: When I use the expression 'human agency', I mean the realized capacity of people to act effectively upon their world and not only to know about or give personal or intersubjective significance to it. That capacity is the power of people to act purposively and reflectively, in more or less complex interrelationships with one another, to reiterate and remake the world in which they live, in circumstances where they may consider different courses of action possible and desirable, though not necessarily from the same point of view (Inden: 1992, 23).

Part II
Introduction

The 'global' technologies of assisted conception are always transferred into 'local' cultural contexts. In the Indian context this has meant that these technologies have been received and promoted in the wider socio-political environment. This part of the thesis locates assisted conception in relation to the private and public sector interface in India as one way of understanding the spread of fertility techniques in a densely populated, developing country. In other words, the chapters in this segment pay particular attention to two crucial aspects. Firstly, to the spread of assisted conception within the private sector reflecting the wider biomedical politics of public/private sectors and, secondly, to the pressures and politicking internal to the functioning of infertility clinics within the private sector and its links with the mass media channels. In doing this it is argued that the need to promote these technologies of conception and the contesting claims to scientific credibility through media channels can be viewed as borne out of an urgency to run clinics at an optimal and financially viable level.

Chapter 3:
Politics of Conception: State, Biomedicine, Infertility & the Arrival of Assisted Conception

The presence of clinically managed infertility in India surprises some. In an over populated country of one billion people pursuing an aggressive State-sponsored policy of population control, not to mention the poverty and the growth pains typically associated with transitional economies, infertility and its high-tech management does not resonate with the Western perception of India.

There remains a definite ambiguity regarding the exact magnitude of infertility and the presence of Assisted Conception in the developing countries of the world. The Indian case is particularly unclear due to a near total absence of research in the area. The reason for this neglect lies partly in the very nature of social science debates that have crystallised around the constructed polarities of North and South. In some of these debates the West and the developed North is positioned against its binary opposite the East and the developing South, where the latter is viewed as preoccupied with fertility concerns and the former with the problems of infertility (Raymond: 1993, Lingam: 1998). Thus the manipulation of fertility is rather simplistically explained away in the context of:

> ...population policies in the North and South ... [where] women as procreators are central to pro-natalist and anti-natalist population policies ... [therefore] it is not surprising that developed countries practice pro-natalist policies domestically and anti-natalist policies [are practiced] in the developing countries ... pro-natalist technologies (like IVF) are developed for the white middle-class women of the North to achieve 'motherhood', and anti-natalist technologies (injectables, implants, vaccines) are developed to control the fertility of poorer women from the South (Lingam: 1998, 206).

Arguments such as this may help explain the monolithic, Eurocentric, neo-Malthusian discourse of Western population policy-makers interested in the 'hyperfertility' of non-Western populations and who view Third-world women as unworthy of high-tech Western infertility interventions (Van Balen and Inhorn: forthcoming)[1]. However this position conceals more than it reveals the ground realities in the countries of both the North and South. Inhorn, for example has argued that:

> ...infertility is inherently political in that it threatens the perpetuation of the body politic. Thus, even when the State attempts to 'control' fertility among a reluctant populace, infertility is rarely viewed as a tenable option, as apparent in the recent proliferation of 'high-tech' infertility clinics in purportedly 'overpopulated', developing countries (Inhorn: 1994b, 459).

Infertility and its medical management may not appear to be in line with the commonly perceived official state policy in India, but it is nonetheless being accommodated under the Reproductive and Child Health (RCH) programme of the Indian Government. There are a number of complex socio-economic and political factors underlying this gradual acceptance of infertility as a legitimate reproductive health concern along side an otherwise anti-natalist population policy.

This chapter argues that to understand the presence of assisted conception in contemporary India it is important to comprehend the nature of biomedicine in India. It begins with a focus on the role of public sector health care, and locates the emergence of assisted conception in the public/private dialectic that has come to characterise the health care system. In doing this, the chapter relates the evident growth of a high-tech fertility industry in an ostensibly overpopulated country to a number of state policies and the private sector's response to these. The chapter then examines some features of assisted conception in the private sector through a discussion of strategies clinicians deploy to establish their work not merely as a

branch of biomedicine but also as a successful enterprise. In brief, the chapter argues that the expansion of private sector medical care is closely related to the existing pattern of public/private sector interaction and that the emergence of assisted conception in India is a feature of this dynamic.

The Political Economy of Biomedical Development in India

Health care provision has been an acknowledged responsibility of the government in independent India. Health care, however, is incorporated under the 'State list' of legislation and jurisdiction, different from the 'Union' and 'Concurrent' lists, thus enabling various State Governments to assume control and responsibility of health provision for their populations (Venkatratnam: 1987). The Indian government in this sense is only responsible for the health of people residing in the Union Territories, and for 'Concurrent and Central Subjects' as detailed in the Constitution of India. However, excessive centralisation has meant that, despite health being a state matter, the states are at best sleeping partners in the process of centralised health care planning and policy implementation. Central guidelines are taken as directives and uncritically applied to the state populations. The genealogy of health planning in post-colonial India can best be summed up as a series of 'Expert Committees' set up by the central government to review the services and delivery systems in the country. For more than five decades these committee reports and recommendations have structured and nurtured health care services and their planning. This process was set in motion by the Bhore Committee in 1946 whose recommendations provided the blueprint for health care policy, a blueprint significantly modified from time to time by subsequent committees once the Planning Commission of India was in place by 1950[2]. Nevertheless until 1983 there was no formal health policy in India and only

after the signing of the Alma Ata declaration on Health for All by 2000 did the government embark upon laying out a formal Health Policy[3]

For the most part health planning in India has stressed preventive and public health programmes with a rural bias (Jeffery: 1988). Indian governments have emphasised rural health care in successive Five-Year Plans. Especially since 1980 rural health needs have received special attention in the shape of massive infrastructural investment and programmes for 'providing primary health care facilities to achieve specific targets'. These targets are: 'a primary health centre (PHC) for every 30,000 people and one sub-centre (SC) per 5,000 people in the plains, and one PHC for 20,000 people and one SC for 3,000 people in tribal and hilly areas' and they have 'been more or less achieved in most Indian States' (The Independent Commission on Health in India [ICHI]: 1997, 38). However, due to apathy and neglect the infrastructure cover has made little difference and rural PHC health provision continues to remain underutilised given poor facilities, inadequate supplies, poor management, lack of monitoring and promotion of personal interests of the PHC staff coupled with indifference (Benerji: 1974, Stark: 1985, Boerma: 1987, Nichter: 1996). In addition, as Duggal and Anita (1993) have indicated, the PHCs do not serve the health care needs as perceived by the people. The PHCs and sub-centres essentially provide and promote preventive health programmes. This means that 'curative services are not a priority in this delivery structure, even when they constitute the main need of the people...The staff of the PHCs and sub-centres spend a major portion of their time in family planning and immunization work and the least on curative services' (Duggal and Anita: 1993, 58).

While the Indian government's commitment to primary rural health care in terms of its willingness to allocate resources cannot be questioned, its failure to

realise health benefits for the rural majority from such an investment is much more problematic. A good case in point is the Maternal Health programme. The Indian government is trying to tackle the conditions of childbearing through better maternal and child health services. The medicalisation of childbirth in India has entailed the establishment of (100 percent State sponsored) sub centres, primary health centres, community health centres, staffed by full-time/part-time professionals or para-professionals, along with a universal immunization programme and the training of traditional birth attendants. In relation to childbearing the ultimate goal is full antenatal screening by doctors and nurses, with most babies delivered under medical supervision in medical institutions. This ambitious plan is part of the Indian government's commitment to rural public health and yet a staggering 100,000 Indian women die each year in pregnancy and childbirth (NFHS Report: 1992/93, 226). This helps clarify why the critics of government health policy have in the main focused on the elitist and urban-oriented curative hospital based services. Such criticisms draw attention to rural/urban differentials in health sector expenditure. Rao et.al. (1993), drawing on ORG data for 1982-83 argue that 'at the national level, as much as 44 per cent of total health sector expenditure was incurred purely in urban areas, as against 15 percent in rural areas (Rao et.al.: 1993, 107). Similarly Duggal and Anita (1993) show that from the first-five year plan to 1986, the number of hospitals increased from 2,694 (117,000 beds) to 7,764 (594,747 beds). In terms of availability to the actual population the improvement is relatively modest, since in 1951 one hospital served 134,001 persons (3,085 persons per bed) and in 1986, 99,176 persons (1,295 persons per bed). Over time, they argue, the rural-urban differential has only increased. In 1956 the proportion of hospitals in rural areas was '39 per cent (and 24 per cent of beds) but in 1986 only 21 per cent of the hospitals (and 18 per cent of

beds) were located in rural areas, one rural hospital serving 351,500 rural persons and one rural bed serving 5,478 rural persons'. In contrast, they show, that in the same year (1986) one urban hospital served 29,115 urban persons and one urban bed served 392 persons in the urban areas (Duggal and Anita: 1993, 56).

This is particularly unfortunate given that it has been shown that in terms of expenditure, allocations to rural primary health care has been almost 50 percent of the health budget (Chatterjee: 1987, Jeffery: 1988, Berman: 1991). This complicates the picture, as the reasons for rural/urban inequity in health care cannot be simplistically put down to paltry economic allocations to the former in relation to the latter. In the absence of any credible empirical research in this area, one can only propose a hypothesis for future research, that is, if there is a bias then it may be at the level of health planning and policy which discriminates and distinguishes between the rural and urban health care needs in terms of preventive and curative needs, rather than in terms of resource allocations. Generally speaking however, the unfulfilled curative needs of the Indian population is being met by growing private sector health care both in rural and urban areas. Whilst the nature of health policy skewed in favour of preventive health care may explain the reliance on the private sector for curative needs in rural India, the situation in the urban areas is more complex. Nandraj (1994) argues that the poor quality of public sector based curative services in addition to the public sector's inability to keep pace with the growing demand for health services is resulting in the spread of private sector health care in urban areas. This, however, does not mean that the 'private hospitals are better equipped, more efficient and manned by better qualified and more humane staff [but rather] public hospitals [have] simply failed to keep pace with the demand...' (Nandraj: 1994, 1680). Duggal and Anita similarly argue that the 'the private health sector has grown from strength to

strength because there is a vast unmet demand. The government has failed to meet this demand but the private sector has served it, whatever the manner and quality' (Duggal and Anita: 1993, 56). The private sector, it appears from this, is filling the demand/supply gap and responding to the unmet health needs of population groups.

One such unmet or rather poorly met need has been infertility management, which has evaded the majority of the treatment seekers in rural and urban areas. The government's priority and commitment towards family planning and family welfare has meant that precious resources could not be spent on any curative aspect of health care that ran contrary to this remit. However, the story of the private sector's entrance as a chief contributor to infertility management cannot simply be understood as a response to an unmet health need. The development of biomedical management of infertility in India follows a more complicated route, one which is part of the rapid expansion of private sector health care itself.

State Policies and the Spread of Private Sector

Despite its avowed commitment to providing health care and planning the state in independent India did not curtail private interest in health provision. On the contrary, under the shelter of a mixed economy model the private and the public health care sectors have established a protracted symbiotic coexistence (Baru: 1998). In the closing decades of the twentieth century, however, there was a rapid growth in the private sector health care (Nandraj: 1994, ICHI: 1997, Bhat: 1993, Baru: 1998)[4]. According to some estimates the private health sector accounts for nearly 70 per cent of all primary medical care and over 40 per cent of all hospital care (ICHI: 1997). The share of the private health sector on the other hand is estimated to lie between 4 and 5 per cent of the gross domestic product (Nandraj: 1994). The rise in the number of private hospitals in India gives an idea of the steady growth of this sector. If one

views the all India figures one can clearly see that in 1973 the number of beds in public hospitals stood at 2,30,161 and this figure rose to 3,65,696 beds in 1993. As against this, the increase in the private sector has been quite substantial as 66,926 beds in 1973 climbed up to 2,10,987 in 1993. The difference in the level of growth between the private and public sectors in particular is noteworthy (data source: Baru: 1998). An emerging body of evidence, mainly micro level data focusing on the growth of private sector in various regions of India such as Ahmednagar district in Maharashtra (FRCH: 1993) and Hyderabad in Andhra Pradesh (Baru: 1998) is providing a closer look at the finer processes of private sector expansion.

There is, however, a continuing paucity of all-India data indicating growth trends in private sector health care. This assumes importance especially given that there is unanimity amongst scholars researching various facets of health care sectors in India on the rapid spread of such private services. The evidence, it appears, for such macro level generalizations is based as much on the existential experience of Indian researchers as on empirically grounded research in the area. Another important factor is the general lack of regulating mechanisms controlling the application and spread of the private sector health care. Bodies such as the medical council of India (MCI) and the state medical councils responsible for maintaining and updating the medical register have failed in maintaining a register of qualified medical practitioners, leading to partial and inconclusive documentation of the spread of private practice in India (Pandya: 1995). There is also much speculation that the number of hospitals in the private sector is much larger than what the available data suggests, mainly on account of under reporting (Nandraj: 1994). Despite the prevailing situation the private sector continues to respond to the health care needs of the population in India. In the rural areas in particular, absence of curative services

has meant that people either turn to government hospitals or use often poorly qualified or unqualified private practitioners. There are numerous studies indicating the high level of dependency on the private sector, dispelling the illusion that the public sector is the primary health provider in the country (Thankappan et al.: 1987, Duggal and Amin: 1989, Yesudian: 1990, Vishwanathen and Rohde: 1990, NCAER: 1992, George et al.: 1993).

The privatisation of health care in India also feeds off specific state policies. In the most recent decade the government offered several incentives in line with its policy of liberalizing the Indian economy. Reduction in import duties on high-technology medical equipment has significantly altered the face of private sector health care. The *Economic Times* of 5 September 1996 records medical equipment imports as amounting to 4 per cent of GNP. The report observed that medical care in India has become 'so high-tech...that almost all medical products are imported. That is, 85 per cent of equipment, 90 percent of consumables and 98 per cent of medical devices'. The *Indian Express* of 12 January 1998 similarly reported a healthy growth in the medical equipment sector. Estimating the industry to be in the region of 600 crore rupees the report spoke of a projected annual growth rate exceeding 20 per cent 'attracting big-time multinationals to tap this market'.

The private health sector was further promoted by state recognition of medical care as an industry (Baru: 1998). It now became possible for individual doctors and private nursing homes to take loans from banks and other financial institutions to upgrade and expand their services, and additionally industries were allowed to diversify into the health sector and invest in multinational collaborations. The emergence of the corporate hospitals has been termed by some as the 'medical industrial complex' (Relman: 1987). Apollo industries in India, for instance, has

earmarked 1250 crore rupees to build over 100 hospitals, of which 50 will be in metropolitan cities, approximately 32 will be specialist hospitals in other large cities, with the rest in small towns (*Indian Express*: 1998). The state has also given consent to foreign collaborations in the health sector. *The Times of India* of 5 September 1995 reported government assent to 55 foreign partnerships, of which six were in the health sector. Significant amongst these were the proposals of Ranbaxy Laboratories for a joint venture with an overseas firm to manufacture anti-cancer drugs, Indraprashtha Medical Corporation Ltd. (IPMCL), and Sir Edward Dunlop Hospitals (India) Ltd. Sir Edward Dunlop (India) Ltd. also proposed to run a chain of 56 state-of-the-art hospitals, polyclinics and diagnostic centres throughout the country. A 100 bed cardiac care hospital near Delhi itself is estimated to cost (US) $25 million and stated to be financed, owned and operated by a consortium of overseas companies and Indian medical personnel (*Times of India*: 1995).

Since Independence, the state in India has not only invested in infrastructure but has also contributed significantly towards the training of medical and paramedical personnel, which in turn has provided a base (albeit indirect) for the rapid growth of the private sector (Baru: 1998). It has been argued that the government policy of training medical personnel from tax payers' money has had a subsidizing effect on the growth of private sector (Duggal: 1989 in Duggal and Anita: 1993).

Medical careers in India's public health sector are far from smooth. Writing in 1977 Roger Jeffery commented that:

> Allopathic doctors do occupy a very privileged position in India and they are striving to achieve a status more closely akin to that of their British and American counterparts. However, they show no signs of being able to improve on their current position, and may well be forced to retreat. The main causes of this situation are the dominant position of the State in India, and the internal disarticulation brought about by Imperial rule in Indian society (Jeffery, 1977, 561).

Jeffrey was primarily alluding to the status of doctors employed in the state sector and to a large extent his assertion explains to this day the level of disenchantment within the public sector health workforce. The move away from the state sector and into private practice in contemporary India reflects this sense of disenchantment. Even when in state employment, doctors are widely known to continue to practice privately (Venkatratnam, 1973, 1987, Baru, 1998). The government over the years - as a result of this practice - has tried with little success to eliminate public sector doctors working privately. In Andhra Pradesh, for instance, two attempts were made in the years 1968 and 1984 to ban private practice of public sector doctors, but on both occasions vehement opposition from the doctors led to a revocation (Baru: 1998). Similarly, Baru provides evidence from Utter Pradesh, where since 1975 three successive attempts by the government have failed in the face of opposition from 'top specialists'. More recently, Baru argues, the governments of New Delhi and Madhya Pradesh have banned private practice (by public sector doctors) and this has 'resulted in an exodus of doctors from the public to the private sector' (Baru: 1998, 50). With better pecuniary returns, minimal state interference and control over one's working conditions, the lure of the private sector continues to attract a significant number of doctors away from the public sector. Against this backdrop a peculiar feature of Indian health services must be confronted. To cite Jeffery again:

> ...health services are not central to class interests in India, either as benefits to be fought over or as important elements in the reproduction of a class-based social structure. The main protagonists are the various kinds of medical practitioners who fight over shares of the cake, rather than the broader ideological issues (Jeffery, 1988, 167).

This observation is made about internal conflicts in the public sector, but, as we shall see in the next section and chapter 4, in the case of assisted conception, it is equally true for the burgeoning private sector.

Against this backdrop of state/public and private interaction, the arrival of assisted conception in India can be better understood, especially since high-tech infertility management in India originated in the state sector. This may appear surprising given the Indian State's long-standing commitment to controlling population. The first scientifically recognized breakthrough - in producing an IVF baby – resulted from collaboration between the Institute of Research in Reproduction (IRR) controlled by the Indian Council for Medical Research (ICMR) and a Bombay public hospital. ICMR's annual report of 1986-87 justified the practice of IVF in a state-controlled research institute by positioning the diagnosis and treatment of infertility as 'complementary to an effective Family Welfare Program' (pp. 47). It was argued that this research would lead to a better understanding of the nature of human infertility so that more effective contraception could be developed. The rationale behind this approach was that if the causes of infertility and of how fertility is induced could be known, it would provide new insights into how human fertility can be controlled through clinical and non-clinical interventions. In an interview given in 1987 the director of IRR Dr. Anand Kumar clearly stated that:

> The IVF-ER technique has now provided a major and justifiable reason to investigate infertile couples thoroughly and thus has offered many opportunities to identify and study factors contributing to infertility. And, *an understanding of these factors may provide clues as to how to induce infertility in fertile couples as a means of family planning.* There are [a] number of lessons to be learnt from Nature's Workshop which has created the infertile couple (emphasis added)[5].

The IVF project (and the state support) was justifiable as long as its development was couched in a vocabulary in tune with the official line of developing effective anti-fertility interventions. The promise of using a pro-natalist technology to perfect and deliver anti-natalist technologies, however, remained a mere promise from the start to the finish of this project. Infighting amongst those associated with the project

contributed to the final demise of the public sector's fleeting but significant tryst with assisted conception and this simultaneously illustrated the links between infertility developments and the pursuit of personal status (See chapters 4 & 5). By the end of the 1980s assisted conception was almost entirely taken over by the private sector. The main protagonists responsible for India's first 'official' IVF baby moved fairly rapidly out of state employment and established thriving private practices of their own, while capitalizing on their achievements undertaken in the public sector. Newer players who followed these 'pioneers' benefited from the reduction in import duties on high-technology medical equipment to upgrade their practice, along with loans from banks and other financial institutions to help pay for their expansion plans and move into more super-speciality areas like assisted conception.

Private Practice: Making it Work

A transition from the public to private sector in any sphere further accentuates demands for survival, sustainability and profitability. The issue, however, is not simply one of the availability of newer medical technology that makes the market in medical care an attractive form of investment (Phadke: 1993 in Nandraj: 1994). Many physicians in private practice in the west, for instance, are arguing that in choosing to enter private practice they essentially choose to start a small business, which entails accepting the responsibilities of being an employer, a business person and a physician, and yet, their medical training does woefully little to equip them with the skills to run businesses (Berrien: 1987, 334). In the case of assisted conception in India, this can mean that individual clinicians not only have to take advantage of the favourable climate created by the state policies but, having done so, must continue to stay afloat. To do this a clinic needs to replenish itself continuously on two fronts: first, to ensure the clinical infrastructure in place is at an optimal level, and second to

ensure a steady inflow of patients to make the enterprise economically viable. In both these cases it is not always possible to guarantee the smooth running of the clinic. There are numerous problems faced, for instance, on account of delays in procuring disposables, culture media and spares for the equipment, due to an over-reliance on imported products. Dr. Chandra (director of an IVF unit in Delhi) described how there had been a slight recent improvement in the infrastructure-related problems routinely faced by the clinic, though she still found timely procurement of even basic items for embryo manipulation very difficult:

> ...procurement of stuff like 'culture media' which has to come from abroad and has to be at a certain temperature, that is still a problem because when you bring in the media you don't know whether the customs has cleared it in time because they leave the boxes (at the airport) and inform you in a day or so. By then everything is ruined. But now agents are coming in and we hope that they will be able to get the stuff cleared in time and store it at the right temperature because if that doesn't happen then you are not going to get anywhere. If the media is all wrong you can't get your results...

Likewise Dr. Suman, interviewed in her Delhi clinic, commented on the problems faced importing 'raw materials' like media especially since it is routinely held up in the customs warehouses for a long period of time – her estimate was 8 to 9 days – resulting in very poor results due to poor quality refrigeration.

Dr Sukumari (an IVF practitioner, Bangalore) was more broadly disappointed with the government's attitude towards infertility management. Despite the government policy vis-à-vis liberalising imports of medical products and lowering of import duties, the ART segment did not benefit, in her view, very much from such moves. In addition she felt that an over reliance on imports added to the stress of running a state-of-the-art infertility facility:

> Why there are not that many clinics even though the population has so much infertility? The major factor is government apathy to the whole programme, so where they could cut down customs duty and make it sort of life-giving category, we still pay hefty customs duties for the

> ingredients, for example on plastic we have to pay 40% or if you've got to get some equipment it costs almost 80% on customs. How can we import so much? It takes minimum 6 weeks so we really got to plan 6 months ahead before we decide that we need something. So anything you need in an emergency there is nowhere you can go and get it straight off the shelf. Actual aspiration needles, disposables for example, we may have a sudden rush of patients sometime and we don't have, or you have the media prepared and kept and you have a short shelf life of media so obviously the hospital pays for it then you have to get new media and then new media again if you have not used it and then there is a sudden rush of patients, you are short of media and then you can't get it! In 1991 when I started the clinic, including the water I had to import. Media is fine, the water in which the media is to be mixed - that also I went and got from abroad. So there was a situation when I got 10 cases of only water as I came from the UK so you can imagine the extent we have to go to and you become the domestic, you become the helper, you become the office boy, you become the boss, you become the medical director, you become the administrator, you become the tax consultant - you have to do many things...

Dr. Sukumari is not alone in experiencing such frustrating delays and day-to-day obstacles in running an ART programme. It was evident from several clinics where I undertook observations that delays in supplies frequently frayed the tempers of consultants and made routine practice highly stressful. An excerpt from field notes at a Delhi IVF unit run by Dr. Neeta helps explain how altercations between the suppliers and the doctors can cause disruptions. On 5 June 1998 Dr. Neeta, on calling her medium supplier, learnt that it was out of stock and this information precipitated a ten-minute shouting match over the phone. Slamming the phone down the doctor, visibly upset, bemoaned:

> I am fed up, tired and I don't know what to do with these people. He committed that 3rd of every month the medium would reach me, now he is saying he can't do it. These people lie to you! They are basically dishonest and don't speak truthfully. I have been trying to get through to these people that I need the medium my patients are scheduled. What answer should I give them? Now he is saying use B2 medium, these people are dishonest, they are compulsive liars, on purpose they mislead. I told him the very first day, give me one date, should I keep 8th for the patients? Yes! Liar! Now there is no medium! He did not even bother to call and inform me - at least he should have done that. Now he is saying why are you shouting at me, everybody in Delhi uses a different medium as and when it is available, but I am not everybody. I want the medium I have

> ordered. I feel so sorry for the patients the amount they suffer [because of such delays]. He is saying use the washing medium for the egg culture, how dare he suggest that! What will happen if the eggs don't hatch? What answer do I have then? Shameful! ...This morning when my assistant called them they told her that we could use other medium, as the one he promised is not in stock. All my energy is spent chasing this kind of stuff. The representatives feel that I am making so much fuss, because all the other clinics adjust to other brands, but I refuse to be like the rest, this is highly unprofessional...

Disruptions caused on account of interrupted supply of vital goods are further heightened by the added demands of running the clinic at an optimal level. Dr. Sachin (a consultant heading three IVF units in south west and a fourth in north India) routinely divides his time between various clinics. In doing this he follows pre-programmed cycles. For example, 12 days before the he is due to arrive at one of his clinics, a batch of 20 patients are put on Metrodin followed by an Hcg shot on the 10^{th} night, so that on his arrival on the 12^{th} day the doctor goes straight into egg retrieval, followed by culture, and by the 14^{th} day the embryos are transferred. This is a high-risk strategy of managing four clinics simultaneously and requires a high level of investment to keep the programme running glitch-free:

> We have to keep stand-by equipment everywhere because it is a batch, it's a big risk! See if there is one patient and the incubator fails, okay I can explain to the patient that there was a laboratory problem, but if there are 30 patients and you have only one incubator and the incubator goes knocks (*sic*) you can't explain to each one of them how each one lost 35,000 rupees on drugs. So everywhere we have stand-bys, 2-3 incubators, UPS (uninterrupted power supply), stand-by generators, 3 ultrasound machines, everything in duplicate and triplicate, fool proof, you know, so nothing can go wrong.

Backing up operations is a fairly common practice in IVF clinics across India. Given the highly unreliable nature of power supply, clinics with embryo freezing programmes take extra care to have UPS systems to prevent mishaps. Dr. Sushila (an IVF practitioner, Bangalore) found the vagaries of electricity supply the most

stressful aspect of doing IVF in India. Faced with fluctuating voltage in addition to routine power cuts had made it imperative to have an efficient back-up management:

> We have three UPS machines, two generators, one is 25 kva and the other is 40 kva and then for everything you have to have a back up and for a back up another back up! If we did not have these problems we would have done so much more...

The most crucial aspect, however, in functioning with relative success in the private sector is in being able to recruit new patients to fill an expensive ART programme put in place often at a great financial cost incurred by the clinician. To start a new centre in this respect is the hardest. Dr. Sachin summed up the pressures of setting up a private practice:

> ...any person who starts an ART centre has very-very high stress level. The reason is that there is a pressure for results if you succumb to that pressure and start doing, you know, that kind of thing-mixing gametes and whatever which can happen in some centres, then you are lost in the long run, patients find out everyone finds out, and you have bad reputation. But if you bear the pressure because there is a learning curve, a growth phase for any ART centre is minimum 2.5 to 3 years, 1000 days, come out of that then there is no problem, first three years are very testing. Patients come and they take half a cycle and then drop out, walk into another centre-they'll talk there (that there are no results here) or you can get only very elderly patients, they are the ones who wait for results to come. This is not only here. I am running four centres and everywhere we started the first year has been bad-all 39, 40, 41 years old, the younger ones say let some results come, let some IVF pregnancies occur then we'll come for treatment. Unless you get young ones you can't have a good ongoing pregnancy rate so it becomes a vicious cycle. It breaks some day but you have to really withstand the pressure, it's too much!

The implications of these uncertainties which clinicians face in running ART facilities helps to clarify a number of ongoing developments in this sector. There is often a great deal of money invested by a clinician, either from personal resources or money borrowed from financial institutions, to fund expansion plans and to ensure the smooth day-to-day operations. This compounds the problem of costs incurred in inducing conception, especially since they are passed on to patients, which in turn acts as a major deterrent for some patients in taking the treatment any further. To fill

an expensive IVF programme with patients, therefore, means to innovate with the clinical methodology of inducing conception and to source patients from untapped reserves along with other cost cutting measures to hold on to infertile recruits (see also Chapter 10). This trend in the private sector is gradually resulting in a string of transnational collaborations with ART clinics in the west, who in turn are looking at India as a new potential growth area in the twenty first century for expanding both clinical practice and research. Some clinicians viewed partnerships with clinics in the west as inevitable, especially given the stringent controls on research and development in Euro-American countries. Dr. Chandra, for instance, spoke of how some experts in the West were:

> ...very keen to come in because things that are not allowed because of government policy there they can try out here. So you do find people trying to find out if they can do a particular thing and have an association here to do it because the government policy is not stringent.

Though she did not specify what 'things' these people wished to do in India, the rapid technology transfer from the West to India appears to be totally without any governmental control. Dr. Lalit (head of his own IVF unit in Bombay) also alluded to the benefits of such a situation:

> There is a report in England that they are not allowing testicular spermited [stem cell spermatozoa] injections so one unit has affiliated with some unit in India I don't know which one in India, you know Simon Fisher started injecting and so they have put a ban on that, so to bypass that they have come to India. I think there is some controversy in England saying if you don't allow we are going to go to some country that does...so its better you allow it and regulate it and use it for good purpose because technology cannot be suppressed...there are scientists for whom there is only one frontier, that of science, there is no frontier of country if he is obsessed with the work and if his country were to prevent him he'll go somewhere else...so the British team is coming here and doing it, you cannot suppress scientific quest for knowledge.

The implied benevolent march of noble scientific curiosity into the developing world in the face of bureaucratic hurdles requires a separate research inquiry. Nevertheless,

the 'production of medical knowledge and its consumption requires the involvement of citizens and subjects in a more direct manner than other kinds of scientific knowledge' (Das: 2000). Western IVF research could well follow the experience of anti-fertility vaccine clinical trials in several parts of the world, including India - where the bodies of poor women become the points of application of a developing knowledge under test (Vishwanath and Kirbat: 1998). In addition to ethical concerns surrounding the outcomes of long-term research collaboration, and the eventual rewards that such efforts would bring to the interested parties, a more immediate commercial dimension of this North-South collaboration has begun to emerge in India. Dr Manker (a clinician from Ahemdabad, Gujarat) has in the recent past set up a private limited company with a percentage share-holding in collaboration with a famous Australian ART centre. The unique selling proposition of this unit is to provide reasonable and affordable IVF to as many parts of the country as possible. Identifying the cost of IVF as the biggest hurdle in recruiting new patients, Dr. Manker and his team used the collaboration to bring in a whole range of treatments that spread the initial investment across the group of four partners. The size of the group meant they could draw in more patients, that is, the higher the patient intake the more easily the infrastructure costs could be distributed amongst the incoming patients thus considerably reducing the cost per patient. The crux of this programme, however, was to bring down the cost of drugs, the single most expensive input in an ART intervention. Favouring Clomiphene Citrate (CC) as against the expensive GnRH analogues (gonadotrophin releasing hormone) for inducing ovulation worked out to be a much cheaper stimulation protocol mechanism making the treatment extremely competitive. The Australian collaborators had in fact researched for a considerable period of time on the use of CC in inducing ovulation and this expertise,

according to Dr. Manker, worked in their favour. This effectively meant that by inducing many cycles with the help of CC they could bring down the drug cost by 50 percent. In addition, a good freezing programme imported from Australia further helped in reducing cost, as embryos could be stored for future use. Using CC against GnRH analogues has its own problems and shortcomings according to other clinicians. When asked if such an approach could double up as a sound practice for lowering drug/treatment costs, clinicians produced differing responses. Dr. Suman, for instance was of the view that:

> It is a good idea but CC is not the drug of choice for every patient. Again you have to be selective, it may not help you to go through seven cycles of CC and you may achieve nothing and one Hmg may do the trick, so depends on the patient selection, you cannot standardise it.

Dr. Sachin, on the other hand, had more practical concerns in the CC vs GnRH: debate:

> Ya! But then if the cost of bringing down [affects] the success rates I would not be in favour of changing it. Success has to be maintained. If we can simply maintain the 32% pregnancy rate [using CC], all for it. There are lot of other critical parameters with CC alone or Hmg alone. In a busy ART centre we would not like to experiment like that. There is too much competition right now. I must be the youngest probably in Bombay doing IVF so the pressure is really very high. In this area alone you can go walking from here to six of the best IVF centres in the country so you can imagine the pressure and in that kind of pressure what ultimately counts is success rates, everything else is immaterial. If I start experimenting trying to bring down costs and do something here and there which I think might bring down the cost, but if my success rate goes down I am finished! So I can't take that risk!

The pressure to keep up with ongoing pregnancies, therefore, becomes a vicious circle - that Dr. Sachin referred to earlier - as pregnant patients become centrally important to recruiting new hopefuls and any cost-cutting measure affecting that could easily sound the death-knell of a clinic. Clinicians like Dr. Sushila also feel pressurised to keep the pregnancies going in order to ensure the commercial viability of the clinic:

> They [patients] are spending a lot of money. If they weren't spending their money there wouldn't be so much pressure on us...they will say [if there are no results] you've cheated us, then they come ask you what is the percentage [of success]. The thing is if you don't get enough people you don't get enough pregnancy, in the sense, if you do get 20 people you may get 5 pregnancies. What if we did not keep up a certain figure all the time? They must see some kind of advertisement, say for example, somebody they are coming for the first time and somebody will say [presumably at the clinic] O! IVF patient pregnant or IUI patient pregnant, that kind of thing it is not as though it's a put on show or a drama or anything because it happens in the hospital, it is a small hospital and everybody knows everybody and they know what is happening and they know IUI patients. 4 of them became pregnant and none of the IVF patients became pregnant if this kind of thing goes on next time I can't get any patients for IVF so I have to keep the fire burning all the time!

Commercialisation of baby-making entails being able to deliver the promised goods, which in turn exacts pressures for acquiring new infertile bodies. For clinicians like Dr. Manker this means tapping markets that are as yet unexplored. To do this he and his partners set up a chain of local collaborations with doctors in smaller cities and towns to source as yet untapped infertility patients. According to Dr. Manker:

> We have recently started with four satellite centres which are not big cities but comparatively smaller, basically town level cities which do not have facilities for IVF but they have a gynaecologist who has an infertility practice, who does trans-vaginal sonography and that doctor tends to the adjoining rural areas so what we have done is to call them to our clinic and taught them the art of monitoring itself, not the actual IVF procedure but monitoring the patient response like how she is responding to the drugs. So what they do is once the patient comes to him and he may feel that the patient needs IVF they would send the patient to us just for an initial screening and adjustment and we decide a protocol for that particular patient and we pass the patient over to the local doctor, that doctor then stimulates and monitors so that the patient need not come to our place during the entire cycle. Only when the patient is ready for [egg] pick up the patient then comes to us, stays at our clinic only for three days and goes back. So access is easier because the local doctor drains a large local area. We ultimately plan to go even into smaller towns provided we get doctors who have the capacity to monitor patients. That forms the crux, unless the monitoring is good we cannot really help them.

Draining a local area with local alliances therefore replicates in microcosm the approach adopted by the Australian partner of draining the Indian market with local collaborators. For the Australian clinic, India was one among other business interests

in Asia, as Dr. Manker explained that his overseas partner had similar commercial interests in China and Malaysia. Whether it is a local clinician or a global player, the search for new markets, newer patients and maintaining the success rate is centrally important to effective and profitable functioning. The situation is further problematised on account of weak infrastructure in the country and its subsequent effects on the costs of investment in equipment and other essential backup. Given these constraints, what can possibly explain a growing trend amongst gynaecologists in India to upgrade their practice to include high-tech infertility management?

Naomi Pfeffer (1987), commenting on what infertility experts in the West stood to gain from the introduction of in-vitro fertilization, argued that, since investigating and treating infertility was long afforded low status in the medical hierarchy, the new techniques provided the gynaecologists with an 'exciting high-status area of research as well as a technically complex practice which only they could use'. She argued that, prior to the introduction of these techniques, a gynaecologist hoping to specialise in reproductive medicine had little to boast of, but pressures towards specialisation within gynaecology brought with it not only official recognition, but higher specialist status, by demarcating the skills of reproductive medical specialist from those of the general practitioner and the general obstetrician-gynaecologist and also greater financial reward (Pfeffer: 1987, 87). In the Indian case, the rapid movement of gynaecologists into a new super-specialist area can similarly be viewed as aligned with the possibility of 'status change' and search for greater 'financial reward'. This has resulted in greater demarcation and guarding of professional boundaries between super-speciality and routine gynaecological work with a corresponding polarisation in the field of reproductive medicine. This ties in with Jeffery's contention, above, on how 'various kinds of medical practitioners fight over shares of the cake, rather than

the broader ideological issues'. A tug of war over professional territories and expertise has, as a consequence, turned patient clients into a commodity that both sides – gynaecologists and infertility practitioners - feel they must tighten their grip around in order to secure their survival in the field. Acquiring patients and holding on to the enlisted ones is therefore central to this professional struggle. In addition to this, gynaecologists doing routine work are viewed as incapable of handling infertility cases. According to Dr. Suman:

> Most of the people are not even aware of what is Assisted Conception. You would be surprised at the type of questions that we are asked from our [gynaecologist] colleagues, they have no idea about IVF and other Assisted Reproductive techniques, simpler ones even, that is why they cannot manage the patient themselves but at the same time they have this feeling that if the patient goes to so and so the patient is not going to come back to them and I think it is maybe an ego problem, as they would say, or feeling of competition with others, but for the patient it is very sad, they end up coming to us very late once they have passed their prime reproductive age. That is why we say we don't have very many patients coming to us.

While Dr. Suman draws a boundary between routine gynaecological understanding and super-speciality insights into infertility, underpinned by a fear of losing out to the competition, other clinicians viewed it as an issue of professional jealousy. Dr. Kamraj (an IVF specialist based in Madras) articulated this most forcefully:

> There is something called, well something that you are not able to eradicate, you can say jealousy or whatever, I am sorry to say but doctors try to push you out so to be honest I have not had even one reference from Madras itself, none! All these years, my first baby is now 6-7 years old, now of late, maybe just recently one or two references from Madras but from doctors whom I don't know at all but my own doctor, a doctor who is helping me in my caesarean when I am not in station, till today has not referred even one case [from her practice] to me, not even one case! And she is practising Obgyn like me. You mean to say she never gets tubal blocks? She's never had an ectopic pregnancy? She's never had pelvic inflammatory disease? She will take them to my rival institutes!

Gynaecologists who hold on to their patients generally do so out of a plain fear of losing patients for good. The crux of the problem is quite simply that both

gynaecologists and gynaecologists with specialisms in the area of reproductive morbidity such as infertility continue to practice routine gynaecological and infertility-related work. The reason for this is graphically clear from Dr. Lalit's following comment:

> ...[currently] 4 to 5 thousand IVF cycles are being done in this country where the potential is for 200,000 cycles which people can actually afford...[this is] because of lack of communication, lack of awareness, lack on the part of the gynaecologists to refer...it is not a weak referral system it is a system where doctors feel if they referred their patients they would lose the general part of infertility patients, also it is a natural response I won't blame them...the general gynaecologist does cater to 80% of the population of the infertile couples which can be treated by AID. Also suppose the patient comes to my out patient and says I am infertile I would treat him, I won't say okay you don't come to me I am only doing IVF or I am doing only micro, probably if I start doing that they [gynaecologists] will refer more cases. That's the point to be noted, maybe if I tell them [patients] look I am not doing routine treatment I will get referrals...We have to be financially viable, at the present stage we have to do routine treatment as well to make it financially viable because the referrals are not good, it is a catch 22 situation.

The panic in the ranks of gynaecologists who either do not aspire to set up IVF centres of their own, or who do not possess the resources for such an expensive upgrade in their practice, is therefore understandable. Not every infertile individual needs high-tech medical intervention, and yet in keeping with the line of holding on to their patient clients, cases that do need to be referred to specialists end up languishing with 'routine' gynaecologists precisely because of an fear of losing business[6].

Some clinicians have tried to find a workable compromise with gynaecologists and have in the process worked out a division of labour that allows them to share infertile patients and profits from them at the same time. Dr. Sukumari, for example, has benefited from that experience in negotiating new mechanisms of referring patients:

> Most of the self styled infertility specialists also do obstetrics practice and there is an innate fear within the person who refers the case that the case is lost forever. This kind of feeling makes them so insecure that even if they

> know that a person is doing only routine infertility work but because that person is attached to a nursing home and that person has access to gynaecological and obstetric work they just don't bother and play an active part in restraining the patient. But here the system has changed because here 8 out of 10 patients are referred patients to the clinic. It is because I insist that they have a doctor before they come and see me so that I can liase with the doctor with reference to the treatment and then get back to the doctor for further antenatal management. I send them back to their doctors. I don't want to run a maternity clinic here.

Dr. Manker, similarly, is among a group of clinicians who have successfully adapted to the psychology behind weak referrals. He has tailored his practice and overcome the fears of local gynaecologists, by making them partners in the game of drafting new infertile recruits by 'draining local areas' so as to keep an expensive ART project running at its optimum level. In addition, large wealthy clinics in major Indian cities are now routinely holding workshops, scientific symposia and academic conferences with the view to not only publicise their facilities by ensuring an active media participation (see chapter 5), but also to court a sizeable chunk of invited members of the 'gynaecological community' so as to work out a mutually beneficial mechanism of acting as the referral base for the infertile patients in the private practice of these gynaecologists.

Conclusion

Over the years the Indian state's support for private interest in (bio)medicine has significantly altered the face of investment in modern high-tech medical facilities. The recent decade has seen a rapid growth in a predominantly curative private sector as against preventive public health initiatives. This in turn has not only established a trend where individuals and industries alike are making investments in the private medical sector, but has also encouraged those seeking curative medical support to evade the public sector. This development cannot simply be explained away as a

feature of difference of interests between private and public health sector priorities but rather also as a product of a long sustained interaction between the two.

Assisted Conception's journey from its humble public sector beginnings to a virtual private sector monopoly is located in this broader context. A technology initially developed at the government's expense and behind the smoke screen of a search for effective contraception, soon broke new ground by rapidly passing into the hands of enterprising gynaecologists who saw in the very process of assisting conception an unprecedented opportunity to enhance their professional, financial and social standing.

The normalisation of infertility and its high-tech medical management in the private sector has had a knock-on effect on the Indian state. There are some emerging indications that suggest that the government is reconsidering its role in assisting conception. With the ministry of health and family welfare and its nodal units struggling to look after the health needs of one billion citizens, the Indian state is finally having to contend with the idea that aspects of health, such as reproductive health, that have potential family welfare consequences for individuals – such as those due to infertility – deserve attention, even if they sit uncomfortably with its stated policy interests of population control. The first direct reflection of this policy shift can be seen in recommendations of the national committee on research in human reproduction, instituted by the government. In its 'Reproductive Health Research Needs Assessment' report (1997), the committee lists as a priority the management of infertility in the national programme. The report justifies this inclusion on the grounds that:

> A significant proportion of couples of reproductive age suffer primary or secondary infertility in our country. This problem can be overcome to a great extent by developing graded facilities for investigation and management of infertile couples at different levels of primary health care

infrastructure with proper referral support facilities including those requiring Assisted Reproductive Technology (ART) procedures...

This is a significant departure from the posture previously adopted by the state on prioritising population control as its sole reproductive health concern for the greater part of its fifty-four year existence. J udging by the success of its population control programme and safe motherhood initiatives it remains to be seen whether the state would once again traverse the all too familiar road of spending precious resources on its stated objectives without succeeding in securing substantial health benefits. In the meantime the private sector continues to grow stronger as more and more private capital is invested to sustain and expand it.

The presence of assisted conception within a supportive climate of private health sector expansion necessitates a closer examination of the conditions that have assisted the emergence of technological management of infertility in India. It is to this that we now turn.

Notes

[1] Germaine Greer (1984) observes in *Sex and Destiny* that 'one of the more unthinking expressions of Caucasian contempt for other peoples is the assumption that they are all hyper-fertile and "breed like rabbits"' (Greer: 1984, 52).

[2] Some of the committees since the Bhore committeee of 1946 are:
Mudaliar Committee, 1961; Chadah Committee, 1963; Mukerjee Committee, 1965; Jungalwala Committee, 1967; Jain Committee, 1968; Kartar Singh Committee, 1973; Shrivastava Committee, 1975.

[3] Prior to this the directions on health issues were provided by the Constitution of India, the NDC (National Development Council), the Planning Commission, the Central Council of Health and Family Welfare, and the Consultative Committees attached to the Ministry of Health and Family Welfare (Source: Report of the Independent Commission on Health in India: Voluntary Health Association of India, 1997).

[4] The reason for this can partly be attributed – as discussed above – to the rural urban differentials in and responses to public (curative) health cover.

[5]Cited in Lingam, L. 1990. New reproductive technologies in India. A print media analysis. Issues in reproductive and genetic engineering. Vol.3, No.1. pp-13-21.

[6] See chapter 9 for further discussion on this and how this affects patients who often feel mistreated and badly managed by gynaecologists.

Chapter 4:
Contested Conception:
The Medical Politics of Test-Tube Babies

The history of in vitro fertilization (IVF) in India is arguably as old as the history of IVF itself. Its origin has been controversial and its subsequent development no less. In vitro fertilization laid the foundation of assisted conception in India and created a terrain upon which wars for the legitimate ownership of the first 'test-tube baby miracle' are being fought. Stanworth (1987) has quite rightly argued that the use of the 'curious term test tube babies' conjures an odd image of a foetus growing independently of the body of a woman - a miracle of science rather than nature. Steinberg (1990) similarly argues that the term test tube baby misnames the site of fertilisation, which does not occur in a test tube, and appears to communicate an extra-corporeal image of the process of conception and pregnancy that contributes to the erasure of women from the entire process (Steinberg: 1990, 78). Even though the term denies women the agency, it is used here, as it has come to be normalized in both scientific and non-scientific (media) discourses on infertility in India. Another important implication of the term 'test tube baby' is that it makes the ownership of the expert primary and that of women/couple secondary. The political struggle over the ownership of the first test tube baby charted in this chapter amply demonstrates how babies technologically created are viewed as scientific trophies rather than as mere scientific resolution of infertility.

The story of the first IVF baby in India has more particularly exposed scientific intolerance to knowledge claims that do not pass under the gaze of peer review. Assisted conception in India today is a contested terrain partly due to an intense pursuit of credit (reward) and credibility (ability to do science) on the part of its practitioners[1]. This quest is accentuated by the presence of multi media rhetoric on assisted conceptive techniques as a long-awaited solution to the biosocial problem of human infertility[2].

This chapter identifies a number of key moments in the growth of assisted conception in India and attempts to unveil the politics of conception by focusing on the contested nature of the claims made by various medical practitioners to being the brain behind the first test-tube baby miracle in India and the role played by media in helping experts compete for legitimacy and recognition. The chapter grounds the analysis in the theoretical concept of credit and credibility as developed by Latour and Woolgar (1986). In doing this, the chapter extends Latour and Woolgar's (1986) thesis by arguing that pursuit of peer endorsed credibility is not always pivotal to motivating scientists and scientific work. It is thus argued that a scientist's ability to do science and the pursuit of reward can extend beyond the scientific terrain especially when faced – as seen in the previous chapter - by the demands of making IVF practice economically viable and commercially sound.

Locating the Contest: The Politics of Credit/Credibility

In *Laboratory Life*, first published in 1979, Latour and Woolgar (1986) pose an interesting question: what motivates scientists? In explaining this they posit an idea of 'cycles of credit'. Critically drawing on Bourdieu's (1975) work, the authors construct what they call a 'market model' to make sense of scientific practice. Scientists' behaviour according to them is:

> remarkably similar to that of an investor of capital. An accumulation of credibility is prerequisite to investment. The greater this stockpile, the more able the investor to reap substantial returns and thus add further to his growing capital. To repeat, it would be wrong to regard the receipt of reward as the ultimate objective of scientific activity. In fact, the receipt of reward is just one small portion of a large cycle of credibility investment. The essential feature of this cycle is the gain of credibility which enables reinvestment and the further gain of credibility. Consequently, there is no ultimate objective to scientific investment other than the continual redeployment of accumulated resources. It is in this sense that we liken scientists' credibility to a cycle of capital investment (Latour and Woolgar:1986, 197-98).

Latour and Woolgar effect a fundamental distinction at least analytically, between credit as reward and credit as credibility. They reserve credit as reward for those instances where there is a sharing of rewards and awards, which is also symbolic of peer recognition of a past scientific achievement. Credibility, they argue, should be taken to mean scientists' actual ability to do science. Interestingly they give primacy to the notion of credibility as being all encompassing, incorporating investment strategies, the scientific reward system and scientific education etc. Credit (reward) and credibility (ability to do science) originate essentially from peers' comments about other scientists. However, scientists become interested in one another not because they are forced to acknowledge each other's achievements by a special system of professional norms but rather because each needs the other in order to increase their own production of credible information. Scientists invest their credibility where it is likely to be most rewarding.

In their argument, there is a deliberate exclusion of politics and power relations from within the practice of science and in the construction of scientific facts. Their notion of credibility is limited to only peer recognition, interested as they are in demonstrating social processes within science. Since they do not take account of the political under-belly of scientific enterprise they exclude the possibility of credibility

and credit (reward) being manufactured both outside as well inside the scientific terrain. They clearly state that they heard many stories about the scandals and politics of the laboratory and decided against using them because of the pressure exerted by the respondents on the observers to acquire the information in which they thought that the observers were interested.

This assumes greater significance in the light of Latour's subsequent work where he clearly acknowledges the societal location of scientific work (Latour: 1983)[3]. In his paper on *Pasteur* Latour makes the following observation:

> Now that field studies of laboratory practices are starting to pour in, we are beginning to have a better picture of what scientists do inside the walls of these strange places called 'laboratories'... But a new problem has emerged. If we are not able to follow up our participant-observation studies far enough to take in questions outside the laboratory, we are at great risk of falling back into the so called 'internalist' vision of science (Latour: 1983, 141).

While arguing for the need to penetrate the scientific 'black-boxes' to access first hand accounts of scientists' daily activities, Latour also explains the importance of a:

> methodology developed during laboratory field studies, while focusing it not on the laboratory itself but on the societal milieu ... Indeed, I hope to convince the reader that the very difference between the 'inside' and the 'outside', and the difference of scale between 'micro' and 'macro' levels, is precisely what laboratories are built to destabilize or undo (Latour: 1983, 143).

This has significant implications for understanding the intricate socio-technical aggregation in science for it acknowledges the simultaneous role played by the 'outside' and 'inside' (laboratory) domains. In *Science in Action* (1987) infact he goes a step further suggesting that in order to understand the world of science and technology one must enter through the 'back door of science in the making' rather than the more 'grandiose entrance of ready made science' (Latour: 1987, 4). Latour thus allows for a dissection of 'scientific facts' entombed as 'unproblematic black

boxes' - the ready made face of science - to reveal the 'uncertainty, people at work, decisions, competition and controversies' that went into the creation of these black boxes, that is the actual process of science in the making.

Latour's approach to the study of science opens a space where it is possible to pose questions of a different kind. For instance, do scientists feel the need to go beyond peer recognition in their pursuit of credibility? Is doing science more than producing scientific articles and a quest for peer citations? Can the producers of scientific facts also become the sellers on the commercial market? What happens when scientific facts have demand beyond the scientific domain? Do scientists invest in credibility cycles not only to respond to peer demands but beyond? And, do such situations change the face of credibility and its locus of production? This chapter examines the politics of the first scientifically documented test tube baby in India in the light of these questions, while attempting to view the process of 'assisted conception in the making' rather than its ready made face. This process reveals the multicentered nature of credit/credibility production and ascription. The chapter therefore extends Latour and Woolgar's peer centered approach to credibility generation.

Rewriting the Past

With the birth of the first 'scientifically documented' test tube baby, Harsha, on August 6, 1986, India officially entered the brave new world of assisted conception. The usage of the term 'scientifically documented' is deliberate as it is repeated *ad nauseam* in scientific circles to negate the parallel claims of a similar breakthrough made by a doctor in 1978, months after the birth of the world's very first test tube baby, Louise Brown, in Britain.

On October 3, 1978 the birth of the world's second test tube baby was announced by Dr. Subhas Mukerji in Calcutta. The news was widely reported in the media in India and to some extent abroad. Mukerji's claim, however, was contested because he did not publish the bulk of his research work in the standard peer-reviewed journals. Ironically, nineteen years on, the story of Mukerji's test tube baby was retold by the man most closely associated with India's first 'scientifically documented' IVF baby.

It was Dr. T.C Anand Kumar, and his collaborators in Bombay (of whom more below), who produced a baby girl, Harsha, as India's first test tube baby. By his own admission:

> Harsha was described as India's first 'scientifically documented' test tube baby because the details of Mukerji's work were not then available (Anand Kumar, 1997, 526).

Delivering the Subhas Mukerji Memorial Oration at the third National Congress on Assisted Reproductive Technology and Advances in Infertility Management, held in Calcutta on February 8, 1997, Anand Kumar made an appeal to credit Mukerji posthumously for creating India's first test tube baby. On April 10, 1997 Anand Kumar followed this appeal with the publication of an article in the journal *Current Science*, titled *Architect of India's first test tube baby: Dr. Subhas Mukerji (16 January 1931 to 19 July 1981).* The story of Mukerji's long-forgotten past was resurrected with the publication of this article and Anand Kumar presented a forceful argument to support the claim - which he personally came to believe - that Mukerji did produce a test tube baby in 1978.

Mukerji had been a medical graduate of Calcutta University where he also obtained a DPhil. He was awarded the Colombo Plan scholarship to work in the MRC Clinical Endocrinology Research Unit in Edinburgh under Professor John A. Loraine,

a reproductive physiologist. In his paper (cited above), Anand Kumar offers an exhaustive documentation of Mukerji's presentations at various scientific and public fora, along with detailed description of his research interests and analysis of the *in vitro fertilization* technique that he deployed to produce a baby girl who was given a pseudonym, Durga. Anand Kumar undertakes this systematic exercise to demonstrate that, even in the absence of published scientific papers in leading journals, Mukerji's work was truly monumental and pathbreaking. According to Anand Kumar, Mukerji was:

> far ahead of his time in successfully using an ovarian stimulation protocol before anyone else in the world had thought of doing so (Anand Kumar, 1997, 529).

Similarly he adds that:

> It may be noted that Subhas Mukerji reported the successful cryopreservation of a 8-cell embryo, storing it for 53 days, thawing and replacing it into the mother's womb, resulting in a successful and live birth as early as 1978-a full 5 years before anyone else had done so. This small publication of Mukerji in 1978 clearly shows that Mukerji was on the right line of thinking much before anyone else had demonstrated the successful outcome of a pregnancy following the transfer of a 8-cell frozen-thawed embryo into human subjects transferring 8-cell cryopreserved embryos. (Anand Kumar, 1997, 530).

Mukerji's happiness, however, had been short-lived. The government of West Bengal appointed an 'expert committee' under the Indian Medical Association and Bengal Obstetrics and Gynecology Association to investigate the veracity of Mukerji's claims. The inquiry committee met on November 18, 1978 to critically review the report given by Mukerji to the Director of Health Services (DHS), West Bengal Government, and rejected Mukerji's claim. Anand Kumar questions this as the committee was headed by a professor of radiophysics and composed of a

gynaecologist, a physiologist, and neurophysiologist. None of these committee members, he argues:

> could have had any background or insight into modern Reproductive Technologies, a subject upon which they were to hold an inquiry (Anand Kumar, 1997, 528).

Mukerji had tried to explain his position and, in a letter to the DHS dated December 1, 1978, he stated that he needed adequate time to prepare the report on his work. Since the report was hurriedly put together in about two weeks of committee's judgment, Mukerji felt that he had inadequate time to plead his case in detail. Anand Kumar however claims that:

> With very sound reasoning, he did not reveal all his data because he wanted to 'publish these in recognized scientific journals after the reproducibility of the work is reasonably assured'. He went on to state: 'The final concentration of DMSO used before freezing as well as the exact indigenous method of cooling were deliberately omitted from the report, like (also) the steps for removal of DMSO before thawing. Certain essential intermediate steps, during the whole procedures also involving the use of undisclosed and enriched media were completely omitted. I had to be careful to guard our unpublished data, because by that time I became aware of the penetrating efficiency of the tentacles of the mass media'. (Anand Kumar, 1997, 528).

Mukerji had to pay dearly for withholding this crucial information. Not only was his claim rejected by the committee but the DHS imposed strict restrictions, preventing him from attending any conference without prior permission. Anand Kumar provides a copious account of events leading up to Mukerji's mental and emotional degradation:

> Mukerji was invited by the Primate Research Center of the Kyoto University, Japan, on 25 January 1979 to attend a closed meeting at their expense to discuss details of Mukerji's work. Mukerji applied to the DHS for permission, which was promptly denied vied their letter of 16 February 1979. The letter directed Mukerji not to leave the country without prior clearance from the Government. Subhas Mukerji shortly afterwards suffered a heart attack. His request for special leave was declined but his request for transfer was promptly accepted and, at 'pleasure of the Governor of West Bengal' he was transferred to the

> Regional Institute of Ophthalmology as Professor of electrophysiology on 5 June 1981. The Government, preventing him from presenting his work at scientific meetings, denying him leave to write up his results, and humiliation he was subjected to by his colleagues in Calcutta were some of the things that the sensitive Subhas Mukerji could not bear. His transfer to a department in which he had no expertise was the last straw on the proverbial camel's back for Mukerji. This transfer order was dated 5 June 1981. Mukerji gave up fighting the system and ended his life on 19 July 1981, 44 days after the transfer order was issued.
> Much of Mukerji's work remained unpublished not because he did not have data but because he was not given a chance to do so by his administrative Ministry in the Government. (Anand Kumar, 1997, 530-31)[4]

The impact of Anand Kumar's appeal extended beyond the medical community. A Calcutta English daily, *The Telegraph*, 16 years on from Mukerji's suicide (February 21, 1997) carried the following report:

> India's medical establishment is under pressure to recognize the doctor's work 16 years after he committed suicide, following a leading scientist's assertion on this count. Dr. T. C. Anand Kumar, an authority on human infertility management and assisted reproductive technology, has rekindled the debate on India's first test tube baby by crediting Dr. Mukherjee [as spelt in the report] with engineering it (Mukherjee, 1997).

The same article reported that Dr. Mukerji's wife was living in 'a twilight of physical pain and bitter-sweet memories and believed that all the moves to recognize her husband's work posthumously would not 'bring him back'. She, on the contrary, hoped for an establishment that would create an environment where a scientist is not driven to death if his genius is not evaluated correctly.

This sentiment notwithstanding, Dr. Anand Kumar's assertions made at the Calcutta conference made it to the major national dailies and the regional press - assertions such as "let me tell you that Subhash Mukerji must be given credit for producing the first test tube baby", "all other achievements dwarf in comparison to what he achieved". The focus simultaneously shifted to Mukerji's miracle Durga, whose identity and that of her parents had been kept under wraps for 18 years.

Headlines such as "Test tube baby's parents reveal all, resurrect scorned scientist" (*Telegraph*, 1997, Calcutta), "Test tube baby, now 18, is ready to talk" (*Hindustan Times*, 1997, New Delhi) added to the drama unfolding in Calcutta. Some media accounts unanimously identified Mukerji's biggest shortcoming as his inability to produce the baby as evidence to consolidate his claim - he either did not understand then, as we now do, or resisted, the notion that babies legitimate the use of new conceptive technologies in very powerful ways (Stanworth, 1987, 27). Moreover, the parents of the Calcutta baby, Durga, fearing social ostracism, had not allowed Dr. Mukerji to go public with the details back in 1978. Anand Kumar himself spoke of the Indian "psyche" that considers barrenness to be a curse. He was widely reported in the media:

> after hearing the lecture, Durga's parents met him [Anand Kumar] to explain why they did not want Durga's identity revealed at that time when IVF was a novel procedure and how they felt differently now. According to Anand Kumar, Durga who is [a] "delightful young lady of 18, well educated and articulate", did not have objection to revealing facts of her birth "if it helped advancement of knowledge". But she did not want the Press to intrude on her or her parents' privacy". (*Hindustan Times*, February 19, 1997).

There were four things against Mukerji. First he did not have a baby to show to the world because of patient confidentiality. Second, he did not have enough publications to support his claims. Third, the all important peer review was absent because of the obvious lack of publications. Furthermore, bureaucratic hostility made it impossible for Mukerji to present any work to the world at large.

Twenty years on, Mukerji is news due to the efforts of Dr. Anand Kumar. What is interesting, however, is the evangelical zeal with which Anand Kumar took on board the campaign to clear Mukerji's name. The situation is further complicated given the fact that, by raising the Durga issue, Anand Kumar stands to lose his claim

to be associated with the first scientifically-documented test tube baby, Harsha. Recognizing Mukerji as the scientific father - of the very first Indian and only the second ever test tube baby in the world - would require a degree of peer recognition and scientific validation from the Indian scientific community that would mark a fundamental shift in the definition of the first 'scientifically documented test tube baby in India'. That is to say, the present claim to the first test tube baby would have to be abandoned in favour of the earlier claim of Mukerji and Harsha would have to be replaced by Durga. This construction of the first scientific baby produced from a test tube is at the heart of the contested terrain assisted conception has become in India. The wars are being fought to salvage and restructure scientific reputations in a thinly disguised rhetoric of scientific and peer documentation. I will attempt to problematise these strategies and clashes of ambitions in the following section.

Birth of a Contest

As was seen above, there is now an ongoing campaign to 'credit' Mukerji for engineering India's first, and the world's second, test tube baby. The genesis of ascription of 'proper credit' may be traced back to the birth of India's first 'scientifically documented' test tube baby, Harsha, when the actual credit allocation, following the media aftermath of the breakthrough, completely disrupted the credibility cycle of the scientific team responsible for the feat. What emerged was a fundamental distinction between the multi-sited nature of both credibility production and credibility allocation. There was a divergence between the credit and credibility as it emerged from peers and that which emerged from the media.

Baby Harsha was the product of a collaboration between an institute controlled by the Indian Council for Medical Research (ICMR) and a Bombay public hospital. The scientific team is popularly believed (for reasons that will become clear below) to

be headed by the collaborating pair of Dr. Anand Kumar, the medical director of the Institute for Research in Reproduction, Bombay (IRR) and Dr. Indira Hinduja, a gynaecologist from the King Edward Memorial Hospital, Bombay (KEM). The rest of the team comprised both senior and junior scientists. With the publication of the IVF project results in 1985-86, India's first test tube baby became a peer-reviewed reality. Even though the information first appeared in the ICMR Annual Report and did not offer the exact scientific details, it opened the way for scientific engagement and peer review. The publication cited the contributing team members before more detailed data on the technique and other accomplishments were revealed:

Title of Project	11.8. In vitro Fertilization & Embryo Transfer: A collaborative project between the KEM Hospital and the Institute for Research in Reproduction.
Project Leader	Dr. T.C. Anand Kumar
Project Staff	Dr. J.V. Iyer, Dr. G.M. Ranga
Project Collaborators	Dr. I. Hinduja, K.E.M. Hospital Dr.C.P. Puri, I.R.R. Dr.T.D. Nandedkar, I.R.R. Dr.K. Gopalkrishnan, I.R.R. Dr.R. Asok Kumar, I.R.R.
Time of starting	August 1985
Approximate duration	Five Years
Provisional date of completion	1990

(ICMR, 1986, 73-74)

The article goes on to state that:

> [The] In Vitro Fertilization and Embryo transfer technique has been perfected and performed as a collaborative project between the KEM Hospital and the IRR. This has resulted in the birth of the country's first ever, scientifically documented, test tube baby (ICMR, 1986, 74).

The project leader and project collaborators are very clearly defined in the article. Dr. Hinduja is but one amongst five collaborators under the project leader Dr. Anand Kumar. The inclusion of the KEM Hospital as a collaborating partner recognizes Dr.

Hinduja's links with the hospital. Together they (IRR & KEM) make India's first scientifically documented test tube baby.

India learnt of this breakthrough on national television's - *Doordarshan* - evening news[5]. On the evening of August 6, 1986 the news carried the following report:

> The first test tube baby in India was born to Mrs. Mani Chawda a 24 year old housewife at KEM hospital Bombay. Our Bombay correspondent reports:
> A pretty and healthy baby girl weighing 2.8 kgs has become India's first scientifically documented test tube baby. She was born to Mani Shanti Chawda at KEM hospital this afternoon at the hands of Dr. Indira Hinduja. The baby was delivered by cesarean section. This tiny bundle is India's first successful case of conception using the in vitro fertilization technique where the sperm and ovum are fertilized outside the mother's womb and foetus transferred inside her for development. Dr. Hinduja successfully used the technique in close co-operation with Dr. Anand Kumar and his institute for Research in Reproduction in Bombay. We spoke to Dr. Hinduja and the child's father Shanti Kumar...

The very first media account shifted the balance of credit allocation in favor of Dr. Indira Hinduja. All through the news report Dr. Hinduja was shown with the baby and the hospital staff and, even as she was interviewed on camera, the project leader Dr. Anand Kumar could only be seen standing quietly next to her. In the subsequent coverage the reporter found it more newsworthy to interview the father of the baby and not the project leader whose name was mentioned only in passing as a close collaborator. Thus, in the evening news, Dr. Hinduja practically walked away as the project leader who, in close cooperation with Dr. Anand Kumar, produced India's first scientifically documented test tube baby. In a matter of hours, from being one of the five project collaborators she became the person who delivered India's first test tube baby, and Dr. Anand Kumar fell from the position of project leader to that of a close collaborator.

The media frenzy that followed the announcement of August 6, 1986, further developed the account in *Doordarshan's* evening bulletin. All leading dailies were splashed with the pictures of and news items on Dr. Hinduja, and the new born wonder and her parents. Dr. Anand Kumar and the rest of the collaborating scientific team were lost to the public gaze in this media melee. Nor did media interest abate with time. With the dawn of the nineties, the field of assisted conception was fully embraced by the popular media. The coverage on infertility and scientific advancements in its management, had become louder and more shrill. The uproar and interest generated in the media by assisted conception was further accentuated by the entrance of newer players in the field. Dr. Hinduja herself, however, had become a cult figure as far as IVF and other related reporting was concerned. No media account could begin anymore without paying tribute to the ground breaking achievement of the lady 'who did it first'. Some common examples are:

> Dr. Indira Hinduja of Bombay is the only doctor in India doing microfertilization. She has a number of other medical firsts to her credit: the first test tube baby in India, the first GIFT baby, the first IVF baby from donor sperm (*The Week*, December 13, 1992).

> the woman who headed the team responsible for the birth of Harsha Chawda, India's first officially recognized test tube baby' (*The Sunday Times of India*, February 6, 1994).

> Dr Indira Hinduja who was responsible for the birth of Harsha Chawda, India's first test tube baby in 1986' (*The Sunday Times of India Review*: January 7, 1996).

The superstardom of Hinduja did not confine itself to the print media alone. She has continued to make appearances since 1986 on T.V chat shows, interviews, and a serialized programme running into a few hundred episodes dedicated to the theme of parenting, even featured her in episodes concerning infertility. In one such episode the Chadwa couple was interviewed:

> Anchor: The Chawda couple has a special place for Dr. Hinduja in their heart:
> Mani Chadwa (Mother): I was never...I was not meant to have a child...but madam did the test tube and gave me a baby. We consider Indira Hinduja God. She is our God. Madam made it possible, everything she did, I feel she (Harsha) is her daughter...

In an another episode Hinduja was extolled as follows:

> ...after all what is a test tube baby? Let us meet the person responsible for the sensational news; the world's second and India's first test tube baby's creator, Dr. Indira Hinduja!

With dramatic high pitched voice-over, the 'goddess' of artificial conception was unveiled to the audience. This small introduction gives an excellent insight into the limits crossed by popular representations in their pursuit for glorification. Yet this misrepresentation of 'documented' facts is curiously in consonance with Mukerji's claim of producing world's second test tube baby and India's first. In one of her earlier television appearances in the eighties, Hinduja was asked directly and right at the start of an interview, about Subhash Mukerji's claim:

> Q: Is this India's first test tube baby or have there been such cases in the past?
> Hinduja: First of all I would like to say that this procedure was a product of collaboration between [the] Institute for Research in Reproduction, which is ICMR's branch, and the other one KEM, Bombay. These two institutes together researched and established this. Your second question was whether this is the first baby. I would like to say that [on] 6th August 1986 the child that was born was scientifically documented, [the] first IVF baby in India.
> Q: It was heard that in Calcutta a similar baby was born. That was not documented...it was not scientifically documented?
> Hinduja: Yes, I would only say this, that this procedure was not repeated and no other child was born because of this procedure.

Dr. Hinduja took the line of least resistance in answering these questions. The fact that the 1986 baby was a product of collaboration between two institutes provided the credibility that Mukerji lacked in an obvious sense. Besides, viability of any IVF project could only be measured by how successful the subsequent applications were. Once again, on that count, Mukerji had been silent and Hinduja had a number of on-

going pregnancies and live births. What is interesting, however, is that this line of questioning and answering disappeared in subsequent media accounts. The term 'collaboration between two institutes' is absent from most accounts that emerged in the print and electronic media. Hinduja became virtually synchronous with India's first test tube baby. Mukerji on the other hand was to remain completely invisible till the beginning of 1997, when for the first time after 1978 the media reported the details of his past; details made available to them by Dr. Anand Kumar.

Contesting Claims

On November 4, 1990, in an English language magazine *The Week*, an article appeared entitled "An ill conceived move: research rivalry leads to winding up of test tube baby project". The article blamed the ICMR for winding up the test tube baby project at the IRR, Bombay. The article began by rather dramatically asserting that the Institute for Research in Reproduction is barely a "test tube's throw away" from the King Edward Memorial Hospital of Bombay and yet a "yawning gulf" has suddenly emerged between the two whose joint effort saw the birth of India's first test tube baby (Rao, 1990). The article went on to quote the director of ICMR:

> Dr. A. S. Paintal, director of the Indian Council of Medical Research (ICMR) under whose wings IRR has been hiding cosily all these years, had this belated explanation: "The major reason for winding up the IVF (in vitro fertilization) unit is that Dr. Indira Hinduja's (she was the brain behind India's first test tube baby) project has already proved its success. And we thought she could continue her studies outside whereas the IRR's funds could be utilised for other important projects (Rao, 1990).

There are two very interesting indications in this extract. First, as early as 1990 it appears firmly established even in the official (ICMR) circles that the test tube baby was Dr. Hinduja's project. It is surprising that the director above describes the project, funded by a government council (ICMR) and executed by an institute (IRR) supported by it in collaboration with a public hospital (KEM), as "Dr. Hinduja's project". It tells

us something interesting about the inroads made by media and popular representations of India's first scientifically documented test tube baby into the official vocabulary. It can alternatively be referred to as the synonymous effect, a product of media reporting that made Hinduja synonymous with the first test tube baby project. Second, it exposes the enunciatory function of the media. The all important bracket, inserted into the objective quote of the interviewee, is made available for the less informed reader who, in case of having missed all the crucial detail about the central role played by Dr. Hinduja, should be made aware of "the brain behind the project". The article goes on to show how the slashing of ICMR's Rs. 340 million budget by 20 percent is used as the reason for terminating the project and further asserts that the figure of Rs. 10 million "gobbled up by IVF is inflated perhaps to justify its killing" (Rao: 1990). Citing modest expenses on the project (from the IRR annual report), the article goes on to argue that the test tube baby research was never a "white elephant" for the IRR. The root of the problem is put down to conflict of interest within IRR:

> ...another vital aspect is professional jealousy: the impression that Hinduja, who is on the rolls of the KEM Hospital, has been hogging the limelight and depriving the IRR scientists, who have been handling the lab side of the IVF project, [of] their share of the glory. Ironically, there was perfect harmony within the IVF unit, but the so-called experts within the IRR who have nothing to do with the IVF project have been fomenting trouble. This led to increasing non-cooperation, raising of hurdles, deprival of facilities and at times open antagonism, which steeply brought down the tally of IVF babies (Rao: 1990).

This article makes a firm case for perfect harmony within the IVF team. However, when personally contacted by myself some of the team members gave very different accounts on the condition of strict anonymity. One team member, for instance, when first contacted on April 13, 1998 spoke of the "arrogant" and "uncompromising" attitude of the gynaecologists that led to the collapse of the project. "The publicity-hungry individuals associated with the project", the informant went on to say "created

an atmosphere of dejection and frustration" amongst the real scientific "think tank" behind the project. Those involved were reported as pulling in different directions. Whereas some were more interested in "promoting themselves", others were too "disgruntled" because their "behind the scenes hard work was not being appreciated" and they were being "systematically side-tracked", even as the bulk of the limelight remained on only a chosen few.

I contacted this respondent again on April 21, 1998 and requested an expansion on the earlier interview. S/he now talked of moves to:

"stifle people who wanted to be heard".

The example given was of a research officer (ARO) who wanted to be included but was transferred without reason and replaced by someone who would not question the authority of the top project management. The respondent further added that "no data" came "from the top", all the hard work was being done in the lab and the data as it came through was simply being "passed on" to the principals. S/he continued:

> "Nobody was trained, neither there was any second in line to take up from where the top people involved in the project left off. Repeated pleas were ignored and people did not even have access to biological material to research with. They decided who got what and when the whole thing got over the entire IVF lab was dismantled and equipment was distributed within the institute to different departments on a piecemeal basis".

The above two interviews with the respondent in question were not tape recorded as the person was extremely anxious about talking on record. However, the notes made through the course of the interview and after record a deep sense of disappointment and anger in someone who was associated with the scientific team purportedly to be "in perfect harmony".

There was some success in interviewing another individual, who also asked to remain anonymous, but gave a brief recorded interview which revealed some considerable grudges and resentment about the project:

> ...you see if at that time we had also trained up some people to take over, like when a person goes away that would have been much better...that couldn't happen...but that was very sad the way she was given publicity, which is wrong, why the council and the government and the...was not questioning our director? Why should she get so much publicity? All the facilities, everything at the cost of the other research, all the money was diverted to this IVF programme and then my God! The credit should have been given equally to the institute. That is why our current director more or less goes on emphasizing that...he goes on projecting our institute at the Ministry that it was our institute, our funds, our this, our effort and that has brought about this [the IVF baby].
> Q: Who was the director when this was happening?
> A: Anand Kumar...he was there, I don't know, he got carried away by the lady. We have a scientific advisory committee who usually assess our projects and gives advice, healthy criticism. There it was also questioned that you have okay...you've developed a technology, you are enforcing it, you are doing it but the technology is going...it is not going for further research. Who are the next in line or would you conduct a workshop so that other people are trained, so that if one person goes, the technology carries forward. But he just gave some vague reason...

The tendency to eclipse the other emerges as the basis on which the contest for credibility seems to be constructed. On the one hand the scientific team claims that it was kept at arms length from credit (reward) and their credibility (ability to do science) could not attain its potential because they were marginalized. On the other hand, the principals, Dr. Anand Kumar and Dr. Hinduja, appear to pursue an approach of mutual obfuscation. There have been very few documented media accounts where there is an open reference to the other as collaborating partner. The earliest accounts like the *Doordarshan* evening news of August 6, 1986, and other similar stray reports have passing references to them both as collaborators. But the closest the protagonists come to acknowledging the other in interviews and in other accounts on the issue of the first test tube baby is to name the collaborating institutes. The two institutes have

been bestowed with a metonymic quality as they almost step in to contain the two collaborators. Anand Kumar for instance made the following assertion in his article on Mukerji:

> The organisers of the recent Calcutta meeting believed that I was pre-eminently qualified and experienced to delve into whatever material was available regarding Mukerji's past work and throw light on it. The reason for this assumption perhaps lay in my having played a key role in the birth of another test tube baby, Harsha on 6 August 1986. This birth was announced by myself, when I was the director of the ICMR's Institute for Research in Reproduction, and Dr. G.B. Parulekar, Dean of our collaborating institution, King Edward Memorial (KEM) Hospital, Bombay...I published our technical report and procedural details in the ICMR Bulletin. The work leading to Harsha's birth was executed by a team of scientists from the IRR and clinicians from the KEM Hospital working under my direct guidance and supervision (Anand Kumar, 1997, 526).

The argument is graphic and bluntly clear on three counts. First there is complete elimination of Dr. Hinduja's name, someone who has become synonymous in the media with the birth of the first test tube baby. Her 'claims' are openly resisted by reminding the readers of the contents of the report published in the ICMR Bulletin (cited earlier in this chapter). The primacy of peer-reviewed documentation over popular media accounts is openly asserted. It is also noteworthy that Dr. Hinduja is conspicuous by her absence even while reference is made to the KEM hospital and the name of the Dean of the collaborating institute is included rather then the more popular collaborator. Second, the distinction between IRR and KEM is constructed on a clear cut scientific hierarchy of scientists over clinicians. A sense of our (IRR) scientists and their (KEM) clinicians is asserted to reclaim the 'reality' that was glossed over by media representations such as 'Dr. Hinduja the brain behind the project'. Third, and most significantly, is the emphasis on terms such as 'key role', 'my direct guidance and supervision,' which completely underplays the importance

and even the extent of the contribution of the collaborating hospital and its now famous collaborating partner Dr. Indira Hinduja.

Dr. Indira Hinduja, on the other hand, had pursued a similar but more subtle line of asserting the primacy of her contribution to the breakthrough that led to the birth of Harsha. In a T.V interview for instance she was asked:

> Q: This technique is not taught in India, where did you learn it from?
> A: I did not go abroad to learn the technique, I learnt from my own experience, first I started with animal experiments, in humans, people who used to come for sterilization. We tried to study their eggs, tried to study fertilization and when it was found that something is happening then we started enrolling infertile couples (*Doordarshan* documentary, 1986)

Clearly the person in question is not 'a mere clinician' as Dr. Anand Kumars' assertion tends to imply above, and this is further supported by the fact that she has a successful practice of her own. However, there is a consistency in these accounts in not acknowledging anyone beyond the self. Dr. Indira Hinduja "did it on her own", Dr. Anand Kumar "got it done under his direct guidance and supervision" and the disgruntled team of scientists "couldn't do anything" as they felt completely side-tracked. There is a complete breakdown of credit ascription to the "other".[6]

Conclusion

The above analysis firmly establishes the multi-sited nature of credibility production. The credibility generated by the media accounts carries with it the potential to obfuscate peer-reviewed and endorsed credibility. The peer-documented credit shared between Dr. Indira Hinduja and Dr. Anand Kumar is different from the credit generated by the media accounts, which focused on Dr. Hinduja alone.

Credibility or a scientist's ability to do science, it is therefore argued, is only a point of departure. Its continual upkeep and regeneration, through a quest for credible reward and recognition, are the mainstay of scientific enterprise when it acquires a

commercial face. This helps in understanding how scientists (Dr. Anand Kumar and Dr. Indira Hinduja) have responded to the demands made outside the scientific terrain. There, the market (infertility patients) judges the credibility of an expert not from what his or her peers have to say though that is centrally important to the scientists' survival in the field - but more so in terms of what is said in the media representation of the experts.

As observed in the first section of this chapter, by raising Dr. Mukerji's claim, Dr. Anand Kumar stands to lose his own claim to be associated with the birth of India's first test tube baby. However, in the light of the foregoing analysis, it can be hypothesized that Dr. Anand Kumar stands to lose nothing at all, as his credibility - which is rather well documented as far as peer citations go - is intact. The professional credit of being associated with the first test tube baby is more or less secure - as long as he does not prove Mukerji's claim. What he lacks, however, is credit of a different kind that no amount of peer citations can generate. This credit or reward is what his partner, Dr. Hinduja, walked away with under media spotlights (and she, in her own right, also has all the scientific and peer recognition of being an able scientist). The official recognition of Mukerji would deny Hinduja what was denied to the rest of the collaborating team all along. Should that happen, the media's attention might shift to the man (Anand Kumar) who dismantled one claim (Hinduja's) and placed another more substantial claim (Mukerji's) in its place.

Whether this hypothesis will stand the test of time cannot be commented upon with certainty. What does emerge with clarity, however, is the fact that attempts are being made to deconstruct the credibility painstakingly constructed in the media and to substitute them with newer claims to credit and credibility. At the end of the day, scientific credibility and peer recognition are available in plenty to the main

protagonists of this story. What is lacking, however, is credibility of a different kind - one which only the loving eye of the camera and affectionate flow of the journalist's pen can bestow.

It is not surprising, therefore, that the search for such credibility and the financial reward that ensues led to a scramble amongst clinicians - who followed in the footsteps of the 'pioneers' – to seek out the benevolent attention of the media. This resulted in a media/medicine interaction, which the next chapter seeks to examine as being instrumental in promoting technologies of conception and their practitioners.

Notes

[1]The terms credit and credibility are used here as developed by Latour and Woolgar (1989) in *Laboratory Life*. For a detailed discussion see below.

[2]More on this in chapter 5. The term multi media/ media is loosely deployed to stand for both print (mainly English language national dailies and popular magazines) and electronic (mainly T.V). In places I use the term media to suggest print media only and multi media is referred to while alluding to the 'total' presence of the media network in India.

[3] *Laboratory Life* was first published in 1979 followed by the second edition in 1986. The thrust of their main argument, however, has remained unchanged. In this sense *Laboratory Life* predates Latour's subsequent work discussed here.

[4]Anand Kumar is not the first to report the events leading up to Mukerji's suicide. Gena Corea in her book *Mother Machine* (1985) has described in great detail how Steptoe and Edwards' success led to a scramble among gynaecologists and physiologists across the world. Drawing on Mukerji's interview given to the CBS reporter Jay McMullen, and on the Sydney Morning Herald reporter Rajan Gupta's report on Mukerji's suicide, Corea gives an account of Mukerji's claim and eventual suicide on page 139 footnote 22:

'Three months after the birth of Louise brown, pharmacrats in Calcutta announced the birth of another test-tube baby. This baby, they claimed, had been frozen as an embryo for fifty-three days by a biochemical engineer who, while getting a master's degree in nutrition at Cornell University, had learned to freeze food. He joined the Indian team at the invitation of gynaecologist and physiologist Dr. Subhas Mukherjee. Mukherjee had worked with animal embryos at Edinburgh University. Then he took a post at a public hospital in Calcutta where he was to conduct research on contraception. Instead, keeping his experiment secret, he worked on human embryos. After the birth announcement, the Indian government said it had known nothing of Mukherjee's experiments. CBS reporter Jay McMullen interviewed Mukerjee after the birth: "Were you afraid then, that the publicity might result in a termination of your research?" "That's right"' Mukherjee replied. "We didn't want anybody to know about this, because we wanted to work".

When it achieved a pregnancy, the Calcutta team decided not to conduct amniocentesis, which, while detecting fetal abnormalities, also poses some risk of abortion. "Because particularly the pregnancy was so valuable in this case" Mukherjee explained to McMullen. "So, I [not necessarily the parents] would rather have an abnormal baby than no baby at all. You see, this is exactly what we tried to prove, that one can freeze and transfer human embryos producing a viable fetus" (McMullen, 1979).

Some researchers doubted Mukherjee's claim, calling it a hoax. The Indian Medical Association appointed a committee to examine his data - data Mukerjee could not authenticate. Describing his claim as "incredible", the committee said that the mother of the "test-tube" baby had conceived naturally. In June 1981, the humiliated Mukherjee hung himself from the ceiling of his home (Gupta,6/26/81). A noted Delhi doctor who had known Mukherjee well said there was "intense jealousy" in the profession at Dr. Mukherjee's earlier success, the *Sydney Morning Herald* reported.'

[5]Television news bulletins and other programmes used in this chapter for the purpose of elaborating the argument could not be referenced as either their exact date of broadcast or channel of transmission could not be ascertained. The accounts were sourced during field work from one of the informant doctors who had copies of the various T.V programmes broadcast since 1986 - on the subject of infertility and test tube babies in India - on personal home video-taped cassettes.

[6] Price (1993) contends that in the context of IVF there is a fundamental departure from conventional assumptions about a doctor's role since the so-called doctor or IVF clinician is 'partnered' with a scientist and as a consequence there is a division of labour between them (This point is re-emphasised in chapter 10). The contest for credibility between Dr. Anand Kumar and Dr. Hinduja can be viewed as a breakdown of such a partnership.

Chapter 5:
Popularising Conception: Media Narratives & Assisted Conception in India

In the closing decades of the twentieth century, media and media narratives in India have become powerful rhetorical devices and this has had an important impact on all aspects of media reporting including science and medicine. Media accounts in India have favourably responded to assisted conception since the early 1980s and this raises some crucial issues. For instance, whilst the credibility of a practitioner may in part be produced and disseminated via media channels, the promotion of both the practitioner and the actual practice of assisted conception through media narratives necessitates a closer examination. This is especially important since chapter 4 explored a special case of what appears to be a more general trend towards promoting individual expertise. The generation of credibility through media discourses, therefore, must be understood in conjunction with a benign depiction of assisted conception in the Indian media, as I will show.

As in western countries, journalistic discourses on science in India appear to have made a transition from the 'awe and mistrust' frame of reporting to a more 'marvel of science' frame of writing (Nelkin: 1995, Dyck: 1995). There is, however, a microscopic minority of media accounts conforming to the 'awe and mistrust' frame and critically confronting the moral and ethical issues involved in the application of the new technologies of conception in India, though such accounts are simply lost in a

sea of uncritical and positive narrations on the new techniques of conception. More recently in the west, on the other hand - particularly in Britain - a shift back to the 'mistrust' frame is very much in evidence in the wake of controversies over genetically modified foods and BSE, though the media coverage on assisted conception continues to remain largely within the 'marvel of science' frame. Cultural accounts such as those of Sarah Franklin (1990, 1997) clearly demonstrate how popular representations of infertility in the media perpetuate 'the myth of the benevolence of new reproductive technologies' (Franklin: 1990, 202). Dyck (1995) similarly argues that popular science journalism has been inclined to project a progressive and beneficial face of science. She suggests that:

> ...the result of this erroneous portrayal is that it neglects both the tentative nature of scientific inquiry and its political context. As the hybrid term 'science journalism' indicates, journalism frequently assumes the form of an institutional advertisement (Dyck:1995, 47).

Dyck further argues that as institutional discourses, science and journalism have a lot in common:

> ...both institutional discourses contain centripetal forces of commerce and ideology; the commercial stakes in medical institutions as well as news organisations are not seldom square with professional requirements. Journalism and medicine are both self regulating professions, defending editorial and clinical freedom, but largely depending on market fluctuations. Most significantly, the ideal of objectivity is inscribed in both discourses, and has materialised in professional routines, normative practice and textual conventions (Dyck:1995, 44).

Here, then, is an extension of the relationship Latour and Woolgar (1986) propounded as underlying scientific practice. The construction of scientific and technological knowledge is not only a mutual give and take between scientists as the authors imply in *Laboratory Life*, but involves a wider social network including the 'mass media' as one of the key players. As Dyck maintains, journalistic accounts of science are

autonomous acts of persuasion, strategically phrased to disseminate a particular view. According to her:

> From a cultural studies perspective, journalism is not a separate discourse, subordinate to science and obediently distributing information to a general audience. Journalism, like science is heterogeneous and permeable; the discourses of science and journalism are produced conjecturally, and increasingly contain one another (Dyck: 1995, 44).

In this sense the medical and media nexus can be argued to have developed along a deep sense of 'mutual need'. Dyck cites an example from *Time* magazine that illustrates the relationship that exists between the assisted conception industry and the media. Lamenting the lack of information made available to the press after the birth of Louise Brown - world's first IVF baby - the *Time* correspondent argued that he (as a journalist) has as much responsibility as scientists do, i.e. the duty to inform the public. Dyck points out that there is an implicit tendency to equate the doctor's mission to help women with the journalists' responsibility to inform the public at large. The reporter in question goes on to argue that because scientists and journalists pursue a common goal they should collaborate and this claim is emphasised by openly asserting the journalistic power to popularise or pulverise the image of science (Dyck:1995).

Such 'journalistic blackmail' is not uncommon in the practice of media reporting. The power of popular journalistic narratives can dislodge a credible claim as efficiently as it can bestow credibility upon scientific truth claims. This ability in some measure ensures a spirit of collaboration between the two domains. In the field of assisted conception nothing can be worse than 'bad publicity', for it carries with it the potential to undo the painstakingly accumulated credibility of any commercially practising scientist. It is precisely this power of journalism to define certain 'narratives' as 'factual' and others as 'fictional' that bestows upon it an equivalent

power to scientific rationality, which in turn defines its reality and excludes others (Fiske: 1992 in Dyck: 1995).

The implications of the foregoing are considerable for the field of assisted conception in India. Drawing on media narratives on infertile patients and assisted conception practitioners this chapter argues that the stories told in these accounts promote both the conceptive techniques and their practitioners. In other words, the chapter tries to show how the media narratives are publicity driven 'institutional advertisements' and how such accounts succeeded in constructing a credible image of the medical experts/expertise. The chapter opens with an account of media engagement with the practitioners. In doing this, it is argued that the construction of credibility and attribution of success to particular 'experts' through media channels is far more pervasive than encountered in a specific case in the previous chapter. It is further argued that this has resulted in the circulation of implausible claims made by various practitioners and that such media publicity not only creates an atmosphere of misinformation but also circumvents the code of good medical practice in India that restricts self-promotion through commercial advertising and media reporting. From here, the chapter goes on to focus on the actual promotion of assisted conception in the media as benevolent and a producer of miracle cures in the face of biological odds. These positive media renditions of assisted conception once again serve an advertising purpose while reinforcing the 'marvel of science' frame of reporting that produces such institutional advertisements.

The First Among Equals:

There exists a composite engagement between media and the medical technologies of procreation in India. Mass media accounts broadly amount to an institutional advertisement approach to reporting, i.e. projecting a progressive and

beneficial face to the medical science of conception and its practitioners. It is unclear why, for instance, the media accounts do not challenge experts and expose fraudulent practices. Such a line of reporting, if pursued, could prove to be no less newsworthy than providing a credible and desirable image of experts and their practice.

In India, favourable media coverage of assisted conception is not simply a product of media interest, but rather such accounts are often cultivated by interested clinicians. For example, a number of conferences and media events have been organised by independent IVF clinics and national consortia of infertility and gynaecological associations. These gatherings - I attended three such big events between 1997 and 1998 in North and South India - turned into media photo opportunities; that is, either a showcase for a particular expert's achievement or publicising an individual clinic hosting a national level meeting. Set in five star settings - mostly hotels - and packed with evening entertainment followed by lavish dinner parties, these events appeared to be carefully planned to ensure full media participation and coverage. In some of these events there was a surprising amount of music and dance performances included to ensure an entertaining evening. One clinic even arranged an appearance by popular film stars for more effective publicity cover. One event in particular was followed by a press conference where the journalists in attendance received (carry home) gifts. In addition individual experts tend to maintain a good rapport with a select group of journalists and news network to secure routine coverage of their activities. What exactly goes into founding this rapport with the media is as yet unresearched, though on several occasions during field work the clinicians were found to be either briefing or talking about media personnel in their clinics.[1]

There appear to be two reasons underlying the need to mount such public relations exercises. Firstly, self promotion and publicity when generated through a purportedly objective and unbiased medium - such as print journalism - ensures a credible depiction since such narrations are phrased to appear as news reportages. Secondly, the need to turn to the media mainly results from a restrictive official framework which does not allow medical practitioners access to conventional advertising channels. According to the Medical Council of India Act 1956, the Medical Council of India (MCI) has the power to formulate regulations and a code of ethics to be observed by medical practitioners. Under the head 'General Principles' of the MIC Act section 33, the code prescribes the principle to be followed by physicians in respect of advertising. Paragraph three reads:

> Solicitation of patients directly or indirectly, by a physician, by group of physicians or by institutions or organisations is unethical. A physician shall not make use of or aid or permit others to make use of him (or his name) as subject of any form or manner or advertising or publicity through lay channels either alone or in conjunction with others which is of such character as to invite attention to him or to his professional position, skill, qualification, achievements, attainments, specialties, appointments, associations, affiliations or honours and/or of such character as would ordinarily result in his self aggrandisements ... nor shall he boast of cases, operations cures or remedies or permit the publication or report thereof lay channels.

Paragraph eight under the heading 'List' further adds that:

> A physician should not contribute to the lay press articles and give interviews regarding diseases and treatments which may have the effect of advertising himself or soliciting practices...

The media coverage of assisted conception in India and the clinician-specific locus of many institutional advertisements clearly point to a widespread violation of the MIC code of conduct. While the experts may attempt to bypass the restriction on lay channels (paragraph three) by remaining focused on the press coverage, they nevertheless violate the code of good practice (paragraph eight) by their attempt to

seek publicity through the agency of lay press. The finer content of the media reports makes this most explicit.

The individual strategies pursued by clinicians in projecting their practice through the various media channels - sometimes in response to similar efforts made by other clinicians - often lead to distorted and contradictory accounts. Without independently ascertaining the credibility of claims made by clinicians, newspapers and popular magazines have been reporting implausible accounts of successful breakthroughs made by those whose meteoric rise in the field was partly due to the circulation of these tales.

The most fascinating of these media controversies is the obsession with being credited with producing India's first test tube baby and other similar achievements in the technological management of infertility. As described in chapter 3, Anand Kumar's support of Mukerji's 1978 claim revived media interest that had mainly focused on Dr. Hinduja's successes. Newer players in the field of assisted conception in the nineties sought to make their presence felt by claiming for themselves the birth of India's first test tube baby. The most recent claimant to the honour is Dr. Mangla Telang of New Delhi. In July 1995 the magazine *Parenting* carried an article entitled, In Quest of Parenthood. In the same article a photograph of the doctor with a young woman and a new born baby appears with the following caption:

India's first test tube baby with her mother and Dr. Mangla Telang.

The baby whom Dr. Telang is shown holding in the magazine article cannot be India's first test tube baby by any stretch of imagination. Given the long and rather well documented scientific genealogy of the test tube baby of 1986, India's first test tube baby could not have been born in New Delhi in the year 1994-95. Dr. Telang would

have much explaining to do in the presence of the Indian scientific community before the history of the first test tube baby in India might be rewritten.

On December 10, 1994 India witnessed its second most dramatic leap in the brave new world of assisted conception. In Bombay the birth of India's first ICSI baby was announced. ICSI (intra cytoplasmic sperm injection) or micromanipulation was reportedly used successfully by Dr. Firuza Parikh of the Jaslok Hospital, Bombay. An English daily the *Indian Express* (Bombay edition), carried the following report:

> For criminal lawyer Kiranjeet Singh Rajput and his wife, Geeta, December 10 was red letter day. On that day they became the proud parents of India's first child born of micromanipulation...the baby boy was delivered by a caesarean operation in Jaslok Hospital, about two weeks before it was expected to arrive, according to Dr Firuza Parikh, the in vitro fertilization expert (IVF) under whose guidance and supervision the entire procedure was carried out.

The *Sunday Observer* of 20 February 1994, months before her actual breakthrough, was even more adulatory:

> Now, for the very first time in South East Asia, there is hope for even IVF's rejects. After three years of diligent research, Dr. Parikh has perfected the delicate process of micromanipulation, whereby only a fifth of the sperm count used of an IVF cycle is required.

Clearly, Firuza Parikh was now ahead of other clinicians as she was credited as being the very first (Indian) scientist to have carried out micromanipulation in South East Asia, not India alone. On September 28 1997 in *the Sunday Times of India* Dr Parikh was quoted as saying:

> "Since our first ICSI baby in December 1994 we haven't looked back", says Dr Firuza Parikh director of the department of infertility management and IVF at Jaslok, one of the 15 centres around the country performing ICSI.

Others clinicians, since Parikh's reported breakthrough, soon followed her to claim some of the media glory for themselves. On 1 September 1997 *Business Standard*, Calcutta carried a news report with the following headline:

New Technique to deliver Freedom from Infertility.

The same news item carried a picture with the following caption:

> The Birth of a New Era: Dr. Kamini Rao [holding the baby] and her team with the first child born in India through micromanipulation.

Interestingly, the article makes the very same claim as that which featured Dr. Parikh.[2] However matters did not rest with this. The *Indian Express*, (Delhi edition) on 21 January 1998 carried a feature on a certain Dr. Gupta from Delhi IVF. The doctor was shown holding a new born baby and predictably the accompanying caption read:

> Helping Nature: Gupta introduces the country's first ICSI baby.

The Times of India, Delhi, however, on the morning of 21 January 1998, carried a slightly different story. In it Dr. Gupta was described as having created a baby through the ICSI technique which was:

> ...first time in the Capital, and the second time in northern India (after Jaipur)...

The need to be 'first in something' is central to all efforts towards the projection of individual expertise. What is also common to all these media narratives is the ascription of territorial space to each expert. The first in -'India', 'North India', 'South India' or even 'South East Asia'. As long as it is a first feat in a particular geographical space, as long as a silent space is colonised and subsequently verbalised as a piece of objective news reporting, a claim can be said to be of some importance and in the running for some appreciation and reward. The claims are either blatantly contestable or, to avoid challenge, are confined to very tight geographic locations. Most importantly the story emerges muddled as these narratives show a pattern of reporting the same feat as being accomplished by different experts. There is a tendency in these accounts to promote the narrow individual interests of specific clinicians or scientists. These reports also point to a strategy of self promotion or

getting ahead of the competition on the part of assisted conception practitioners. In short, the task of creating a 'credible image of the expert' and the techniques they wield is at the centre of most media reports.

Manufacturing the Baby Maker:

It appears from the foregoing that in making the baby maker, the media performs a dual task. Firstly, to produce an account of the new technology in a way that appeals directly to the readers, and secondly to deliver a credible and desirable image of the experts in these techniques. The 'headline' in such journalistic accounts becomes the point of entry into a more detailed narrative. The headline and the detailed narrative on the other hand are mediated by a brief and boldly inscribed synopsis or introduction of the main contents. This is usually the second passage which eventually opens the dense text to the reader. Some common examples of this style of textual presentation are:

1.
   A Single Sperm.
   That is all the specialist will take from the willing father. To inject into a waiting egg. And the miracle of life is on its way. *Sameera Khan* reports on a special, super-high-tech in-vitro fertilisation technique which will allow men who have almost no sperms to become fathers (*The Sunday Review, Times of India*: 28. September. 1997).
2.
   Zero Sperm Count?
   Try micromanipulation (*The Times of India:* 11. March. 1997).
3.
   Crazy For A Baby.
   Time was when if you couldn't have a baby, well you couldn't have a baby. Today a variety of assisted reproductive techniques have infertile couples flocking to the fertility centres that have sprung up everywhere (*Sunday Observer:* 16. April. 1995).
4.
   We Want A Baby!
   Science has helped wipe away the curse of infertility offering cures to both men and women. Today almost no couple need be childless (*Femina:* vol-37 (18), 15. September. 1996).
5.
   The Making of A Father.

Test-tube babies are old hat. What's new is that it is possible for a man with zero sperm count to have a biological child (*Indian Express*: 21. January. 1998).

6.

Infertility. Making Babies...
...is now possible for millions of infertile couples thanks to sophisticated methods which have become available for those struggling to cope with social disapproval and heartache (*India Today*: 15. June. 1993).

These headlines and the crisp synopsis (i.e. an abstract) exhibit the same relationship that exists between a headline and the body copy of an advertisement. Like all good advertising these journalistic accounts at the outset explain the merits of the product on sale - merits such as simplicity (a single sperm is all a specialist will take...), superiority (special, super high-high-tech in-vitro fertilisation technique...), and reliability (allows men with zero sperm count to become fathers...). These journalistic advertisements also deploy conventional methods of making the message more alluring, tempting and enticing, at the same time giving the impression of offering a choice (Zero Sperms, Try Micromanipulation, Crazy for a Baby...). In some accounts there is a distinct sense of 'do what everyone is doing'. Similarly another theme appears to urge the consumer to try out the latest as they now have a 'variety of assisted reproductive techniques' to 'flock' to. Then there are the latest arrivals on the market, which are both new and improved with the promise of making a 'father'. Finally the couples are told to kiss 'social disapproval and heartache' good-bye because modern science has 'wiped away the curse of infertility' and 'no couple need be childless anymore' as the age of 'making babies' is here.

This is not a mere facetious caricature of these media narratives. These deconstructions attempt to uncover the semantics of promotion pursued by newspaper/magazine articles and communicated to their readers. In these accounts the

themes of 'hope, fulfillment and dream come true are thus linked to the miracle of modern science, a test tube baby' (Franklin: 1997, 95).

The task of selling the technologies of procreation is incomplete without the inclusion of the clinicians who make it all possible. This representational exercise prominently features the use of a device - 'narrative closure' (Franklin: 1990). In most accounts the experts are made to wait in the wings before it is time for them to be inserted into the overall framework. To assist in facilitating this stagedoor entry onto the centre stage the articles often make use of 'desperate', 'helpless', 'hopeless', and 'very sad' couples by attributing the resolution of their emotional and physical misery to a particular doctor. Franklin (1990) makes an extremely important point when she states that:

> The provision of a medical 'cure' provides the physical resolution to the desperate infertile couple, but there is often an emotional resolution provided to complete the 'happy ending'. For this purpose, the subjective point of view of the infertile is often reintroduced to provide narrative closure (Franklin: 1990, 212).

There are some very telling examples of such a narrative closure in Indian print media accounts of conception technologies and their practitioners. The significant difference, however, is that the task of offering the closure is shared between the author of the media narrative and the subjective point of view of the couple. This lends even more authority to the presentation of the physical and emotional resolution. If, on the other hand, these accounts are analysed on the basis of their stylistic content then they appear to conform to a 'testimonial style advertising' format. Journalistically and commercially (advertising mileage) the accounts are on solid ground, as they communicate an air of objective, truthful and real life happenings. The article How Some Indian Babies Are Made, which appeared in the magazine *The Week* on 13.

December 1992 stands apart as a good example of this third voice (voice of the journalist):

> When all looked lost for Seema, she read an article on the infertility department on the Jaslok Hospital in Bombay...later they heard about the husband-and-wife team of doctors, the Malpanis, who had just set up their nursing home in Bombay. With little hope of success, Seema and her husband got in touch with them. Dr. Anirudh Malpani patiently listened to them and explained the options available, but he did not give them any guarantee...last May Seema conceived through artificial insemination...

The same article goes on to describe another story, this time providing more personal details leading to the closure of the narrative on both a fantastic 'cure' and its provider:

> Divya Ghatalia, 30, lives with her husband, and his six brothers and their families, and in-laws. Eight years after marriage, she was still without a child. Whenever a baby was born in the big family, Divya would bustle around helping in the delivery and celebrations. But she could not reveal to anyone how it wrenched her heart.
> After a couple of unsuccessful attempts, Divya and husband Harshad Morarji Ghatalia realised that they had a problem. That started the rounds of gynaecologists, sperm counts, X-rays, tests and two operations... "I was not at all happy. All those doctors were sticking to old and tried methods", recalls Harshad. Later they approached the Malpanis. "After examining all our reports, he said we would have a positive result within six months. The doctor was really confident", says Harshad.
> As Dr. Malpani promised, Divya became pregnant after the third cycle of artificial insemination. The couple closed the bleakest chapter of their life with the arrival of Nikunj and Nikhil on June 25 last year. Says Harshad: "It did not cost us much, just around Rs 10,000. The same treatment abroad would have cost us Rs 4-5 lakh"

The account appears to portray an objective picture of the Malpani doctors. They do not offer false hope or guarantees and deliver what they promise. The narrative also projects the crisis in the life of the suffering couples by giving a fair coverage to their circumstances and disillusionment with conventional treatment. After the crisis reaches a crescendo the narrative inserts the main protagonists - the doctors - in the story who close the 'bleakest chapter' in the couple's life. The narrative closure here

is provided by an objective and disinterested third party - the journalist - who has no axe to grind.

The technology offered in accounts above as a resolution to the couple's problem is not exactly high-tech. The article seems to be aware of this and goes on to state:

> If even artificial insemination fails, there is a family of techniques known as IVF, or in vitro fertilisation.

The article provides a detailed description of the techniques available and brings in the media star of assisted conception, Dr. Hinduja, to deliberate on the issue:

> "The percentage of couples who require expensive IVF is very small", says Dr Hinduja. But she has lost count of the patients she treated at the KEM Hospital, Bombay, before going independent a year ago. A rough guess is over 400.
> On November 5, 1986, she delivered three babies all conceived on the same day by IVF. One of the three was Chinmai, born to engineer Charuhas Satam, 40, and wife Sheila, 38. For years before treatment by Dr Hinduja, Sheila's tubes were blocked.
> Achieving fertilisation despite those tubes cost the Santams Rs 2 lakh. Says Charuhas: "Money was no limiting factor for our baby. When we finally had a baby, the feeling was top-of-the-world. For us it is the start of a new cycle of life. Our son is absolutely special to us". Sheila, a State Bank clerk, absolutely dotes on her son, now six.

It is made clear to the reader by the expert that very few people need IVF and at the same time she has 'lost count' of the number of patients she may have treated. Clearly this implies that even a small percentage of couples are large enough for a single expert to lose count, let alone the gamut of similar experts in India. Infertility, when argued in such a way, becomes a big problem, suggesting that the sheer number of people needing high-tech intervention in India is very high. Yet another subtle suggestion is that the couple had no hope as Sheila's tubes were blocked before Dr Hinduja's treatment by-passed the problem. A sense of money being of no consideration when the result is a 'top-of-the-world feeling' - is communicated by

including the happy father's voice in the story. The happy ending of this couple is made complete once again by the 'third voice' which closes another successful narrative of conception by giving a sense to the reader of the happiness in Sheila's life because of her six year old son.

The same article goes on to recognise the fact that not every success story of assisted conception has a happy ending. It does not, however, talk about the stories which never ever have a successful ending. The narrative only has tales of never ending courage and hope to tell; that is, tales of couples struggling with infertility treatment, opting for adoption and still not giving up, keeping the faith and trying very hard. It is a positive message to communicate to the reader - who could be a potential consumer of these technologies, a message to try till you succeed. The article ends on the following note:

> Some fail and refuse to try again. Some fail and refuse to give up.

The reader is left to make up his or her mind, with the clear message that they will never know to which of the two groups they belong unless they 'try' in the first place. Johnston et al. (1987) and Price (1990) have similarly argued that media accounts predominantly feature successful outcomes and stories of failure seldom appear in these popular accounts resulting in an overestimation of success amongst treatment seekers.

It is clear from chapter 3 that the 'technodocs' alone are also the focus of publicity-oriented media accounts. A good example of such a blunt technique is an article glorifying the achievements of Dr. Parikh in the *Indian Express*, Bombay 15 February 1994:

> This doctor succeeds where IVF fails.

The primacy of the technician over the technique is noteworthy in this headline. In one sharp line the article ensures that the credibility of the doctor is significantly enhanced.

Similarly, the *Illustrated Weekly of India* in March 1991 reported Dr. Kamini Rao's SIFT technique as ground breaking research. You've Come a Long Way Baby, read the title of the article accompanied by a picture of a new born baby. Interestingly, the usage of the term baby not only draws attention to the large baby picture but also obliquely refers to Dr. Kamini Rao. This became clear when the article read like an anthology of her work and a personalised biography rather than an 'objective' media report. The most significant part of the article is its beginning itself which gives the reader an immediate taste of the things to come:

> In the news for a while now, Dr. Kamini Rao, as the originator of the Semen Intra Fallopian Transfer Technique or SIFT, as it is commonly abbreviated to, deserves every bit of the limelight that has come her way.

The article goes on to describe the technique as nothing short of manna from heaven for those couples who due to various reasons could not conceive. It makes a candid proclamation that the doctor deserves the credit that has come her way. Besides, any potential ambiguity regarding this is forcefully removed in the finer details supplied in the account about her hard work and dedication, as well as the state of the art clinic from which she operates. The article in some measure is scientific in its tenor and tone and at the same time reads like an advertisement:

> ...from its modest beginnings as an adjunct to her father's nursing home in the Kumara Krupa locality in Bangalore, the centre today is a state-of-the-art facility, reported to be first of its kind in the country, offering a range of sophisticated equipment to help a couple with reproductive problems all under one roof. It has a number of firsts to its credit, including vaginal scanning for follicular growth. This technique helps to accurately measure follicles, which is necessary for the precise timing of ovulation. It also provides fluoroimmunoassay technique for hormonal assays as against the older radioimmunoassay technique...the centre also offers semen

> banking...Rao's centre, with a staff of four doctors, has the capacity to handle about 40 cases a day. Therefore, the inpatient facility available here is more in the nature of day care, as all Rao's procedures are short and simple. SIFT is too: the patient can return home in an hour or two.

The account appears to be tempting any person with a fertility problem to give this clinic a try. The article imaginatively combines scientific and journalistic styles to create an institutional advertisement which makes the subject - conquering infertility - appear magnificent and yet attainable. The presentation style tries to achieve a balance between popular journalistic representation and scientific jargon. This amalgamation of styles carries with it the promise of generating the much needed hype and credibility. The finer content of this article tells the consumer what to expect and how and where to get it. So detailed is the article that it even tells the reader in a round about manner where the clinic is located (an adjunct to her father's nursing home at Kumara Krupa locality in Bangalore etc.) and, once there, what to expect, which is nothing short of state-of-the-art. The article successfully paints a most credible picture of the expert, as someone whose ability to do science is second to none.

Conclusion:

This interesting admixture of science, journalism, and advertising helps explain in part the commercialisation of assisted conception in India. The ability to assist conception is of immense commercial use when the competence of its practitioner can in some way be made public. Peer-endorsed ability to do such science is of more value in this venture when it becomes the basis of media promotion. Hence the race to be 'first' in doing something in the field of assisted conception amongst the scientists in the preceding media narratives. The most interesting aspect of the media/medicine symbiosis remains the breach of the MCI Act by the practitioners. Due to the self-aggrandisement sought while courting the media or simply yielding to

the lure of media hype, the practitioners appear to be conveniently bypassing rules that should ideally structure their practice.

What makes the politics of conception and its public articulation interesting is the capitalisation of human fertility and its need. The discourse that is painstakingly built around the issues of credibility and glorification of the new technologies of procreation as a long awaited answer to the scourge of human infertility has successfully identified the cultural importance of children in Indian society as its point of departure (chapter 6). The subsequent success of these technologies builds upon a justification that scientists respond to the 'demands made by the society', thus making invisible the 'political constructedness' of this bio-technical structure. Irrespective of the origin of the so-called 'need' for fertility, assisted conception technologies are established in India. We saw in this chapter how the need for these technologies and their experts is being validated - at least in part - through media narratives. Taken together, more generally, the chapters in this segment of the thesis can be read as reflecting how the pressures of private practice necessitate self-promotion and competitiveness amongst practitioners, in order to remain in the 'business of assisting conception'. As Frances Price argues that:

> The marriage of medicine and market, however, creates a political alliance that is particularly potent when the practices involved bring new persons into being. Bolstered by the unique authority of the institution of medicine and the established status of clinical judgement, clinicians are well placed to shape the context in which they practice. Deploying the vocabulary of supply and demand combined with a humanitarian rhetoric, they can successfully promote the development and maintenance of 'efficient clinical services' in both public and private domains, influencing government policy, industrial investment and media coverage (Price: 1999, 53).

Several themes in Price's contention resonate in part or full with the evolving face of assisted conception in India bolstered by the positive media renditions, even as it is

becoming increasingly difficult to predict the shape of things to come given the pace with which newer players are entering the field.

Part three of this thesis appears to be a world away from the contemporary (modern) politics of conception as it explores the traditional realms of Hindu community in which the understanding of (in)fertility is situated. These normative ideas have wide currency in contemporary settings. An individual's experience of stigma and social ostracism is produced in relation to these ideas that have remained in circulation for centuries undergoing profound changes and embodying very different meanings in different guises.

Notes

[1]The entry made in the field notes journal on the 8th of April 1997 is revealing:
"... there is tremendous excitement in the room, Dr. X walked in and the discussion shifted to the news coverage ... everybody is leafing through the newspapers and they seem happy to see the coverage ... pointing to a news item in particular, Dr. X said that he personally gave the brief to the newspaper on what to print ..."

[2]One of the many pages on Dr. Rao's Web site - when visited by me in 1997 - was dedicated to information on her professional skills and career. A long and impressive curriculum vitae was followed by a short description of her laurels which included the birth of South India's first ICSI baby on 15th August 1997. It is possible that this piece of news was blown out of proportion in the subsequent media reporting which turned this event into another of India's "first" ICSI births.

Part III
Introduction

In Hindu India – as in 'other cultures' - cultural norms and ideas are inextricably bound up with how people experience and make sense of disruptions to life processes. The disruption caused by Infertility at once connects the worldly and otherworldly dimensions that together give meaning to everyday existence. This part of the thesis provides an insight into cultural conceptions about fertility and infertility. Although these ideas originate in classical texts and oral story telling traditions, they nevertheless permeate contemporary thinking about human fertility. The social experience of infertility and the experience of stigma associated with such a condition can be located within this wider cultural context. Human fertility in this worldview is quasi-sacred and inherently gendered with differing male and female inputs underpinning the reproductive process. The male input in this schema is ascribed a superior status and females accorded a more passive responsibility of bringing a pregnancy to fruition. A disruption to this division of reproductive labour heralds a socio-cosmic crisis that results in stigmatization and ostracisation of the inflicted bodies. In understanding the cultural strength of fertility beliefs and the debilitating experience of stigma one can also better understand why infertile couples readily turn to assisted conception to both fulfill their desire for a family and to salvage their socially fractured personas.

Chapter :6:
Fertile Conceptions: Culture & Infertility

In India as in many parts of the world the centrality assigned to fertility and an ability to translate this fertility into pregnancy and eventually childbirth is one of the most important bases of assigning a woman her personhood. For a man fatherhood is the only chance of establishing his masculine credentials in a manner which is visibly public. Taken together, for the married couple fertility and its outcome are often viewed as the only or main source of happiness, worldly and otherworldly merit. However, in India, anxiety in the event of an inability to produce a 'visuality' of womanhood and manhood in the public domain arises also from its perceived cosmic consequences and is thus better understood in the context of Hindu conceptualisations about human fertility. These norms and ideas are firmly rooted in quasi-sacred myths, epics and ancient codes of law, which provide some sense of the urgency with which the Hindu community engages with the subject of infertility and the social complications it engenders.

The importance assigned to human fertility and the quasi-sacredness bestowed upon it by the ancient *Vedic* and *Puranic* texts has profoundly animated the contemporary Hindu worldview. These textual sources are part of a rich oral story telling and visual iconic traditions in India. As such, they help structure and reconcile culturally appropriate responses to social and biological issues. This chapter seeks to explore (some of) these fertility themes as they emerge from such ancient sources, with a view to understanding how these ideological and normative frames resonate across a rich tapestry of contemporary cultural thinking and practices in India, a

society in which everyday religiosity has particular significance and where the 'sacred' touches almost all aspects of human existence. The chapter discusses a range of ideas echoing the importance of human fertility and the socio-cosmic crisis its absence is held to create. In doing this, the chapter attempts to interlace ancient textual sources and contemporary anthropological/sociological studies, to provide an introduction to social attitudes towards infertility and to the cultural approach to managing a failure to conceive.

Fertility: Expectation and Dictation

The cultural importance of women as visible symbols of fertility and continuity, i.e. the actual locus of reproduction and regeneration was firmly established in the *Vedic* practices. With themes such as perpetuation of the self, abundance, and life-engendering symbolism associated with the concept of fertility, we find that much of the *Vedic* period was firmly organised around an ideological premise where the procreative power of the fields and that of women became central components of social life.

In the ancient *Vedic* literature, and later in the *Puranas* and the *Dharmashastras* (law books) alike, woman is often referred to as the *kshétra* (field/soil) and the man as the *beja* (seed). The ancient laws of *Manu* echo this view most explicitly:

> By the sacred tradition the woman is declared to be the soil, the man is declared to be the seed; the production of all corporeal beings (takes place) through the union of the soil with the seed (*Manu*: IX, 36, 33, 333).

The field/seed dualism and symbolism also occurs in many contemporary understandings of reproduction. Khare's (1982) study, for instance, brings together an interesting mix of informant and textual statements to highlight the culture-specific formulations of this analogy. The *bija* comes to represent the necessary *karma*, and *kshétra* thus becomes the field where the fate or destiny of the *bija* becomes known

(Khare: 1982, 157). Veena Das's (1976a) case study of fifty Punjabi urban households explains the 'Punjabi theory of procreation' in which the woman provides the field and the man provides the seed. Das goes on to emphasize that in the Punjabi understanding:

> ...the quality of the offspring is determined by the quality of the seed. Nevertheless, the field should be able to bear the seed. If the seed is very powerful, it will 'burn the field'. Hence it is important that the qualities of the genitor and the geneterix are evenly matched (Das: 1976a, 3).

Leela Dube (1986) argues that over almost all of northern, central, and parts of eastern India human reproduction is 'expressed' in terms of seed and earth. Using ethnographic evidence ranging from Gond (Dube: 1956) and Khasi tribal communities to the Kashmiri Pandits (Madan: 1981) and Bengali kinship studies (Fruzzetti and Ostor: 1976, Inden and Nicholas: 1977), she argues that a specific cultural conception has taken firm roots in a fairly wide geographical region[1].

This theme - i.e. the field/seed dyad - finds further expression in the various festivals and rituals where female fertility and sexuality become homologous with agricultural practice. Bhattacharya (1977) gives an exhaustive compilation of various beliefs centred around female biology and the cult of the mother goddesses. The fertility ritual called *ambuvaci*, which is observed by Bengali women in India from the seventh day of the third month of the Hindu calendar, has a belief tied to it that for four days mother earth menstruates in order to prepare herself for the work of fertilisation. As a result there is complete cessation of ploughing, sowing and other farm work (Bhattacharya: 1977)[2]. The homology between women and earth/soil is taken further to express what Dube (1986) calls an 'idealised role':

> Like the earth a woman too has to bear pain. The earth is ploughed, furrowed, dug into; a woman too is pierced and ploughed. A common metaphorical expression for sexual intercourse is ploughing (Dube: 1986, 41).

Dube further argues that ploughing is strictly forbidden to women, despite the fact it is not an unusually strenuous task for women.

The point of similarity between (mother) earth, mother goddesses and women (as mothers) goes far beyond the biosocial fact of reproduction. It inscribes a deep symbolism of nurturance, maternal love and duty which equates women to goddesses and goddesses to women.[3] The ideology of motherhood therefore becomes one of the many central themes around which the 'two great national Epics of India' - *Mahabharata* and *Ramayana* (Meyer: 1971, 2) are constructed. Taken together these two Epics exert a very considerable influence on peoples lives to this day; the norms and ideas enshrined in these works form an important subtext in the *conscience collective*. Examples range from the ritualised enactment of the *Ramayana* every year in most parts of Northern India to more recent television adaptations of the *Mahabharat* and *Ramayana* in serialised form broadcast on state television. It is these, in particular, which illustrate the rootedness of these Epics in contemporary Indian life (Sutherland: 1991). The state-sponsored television, in the words of Rajeshwari Sunder Rajan (1993), has a:

> dual obligation in its representation of women and religion - on the one hand to acknowledging the state's constitutional commitment to equal rights (in [the] case of women) and to secularism (in [the] case of religion), and on the other hand to developing a new idiom of 'nationalism', equated with a valorisation of the traditional (which is preserved, precisely, in and by women and religion) - redefines the two terms [women and religion] flexibly (Rajan: 1993, 134).

The central female figures appearing in these televised Epics and in popular understanding and interpretation of these works, have become not only an ideal of femaleness but also potent symbols of Indianness. Prabha Krishnan (1990) in her critical account of the construction and projection of motherhood in the televised rendition of *Mahabharata* and *Ramayna*, has raised some crucial issues concerning

the impact of idealised constructs of Indian womanhood/motherhood. She is especially critical of the stereotypical constructs of ideal and chaste woman in the depiction of Sita - the heroine of *Ramayana*, who also happens to be the female role model and a prime example of a woman's devotion to her husband in contemporary Hindu thinking. But she is also critical of a very effective depiction and separation of 'good' and 'bad' mothers in these epics, where the latter are invariably women who are not under direct male supervision. Krishnan argues that through 363 transmitters television in India can in theory reach nearly 75 per cent of the population. This makes television a powerful propagation medium. Drawing on her personal observation she further asserts that the viewers of these programmes have not remained confined to Hindus but rather cut across religious boundaries and include a large Muslim audience (Krishnan: 1990)[4]. The potential of this epic to shape the worldview of a captive audience has rightly been termed 'enormous'.

The subject of motherhood in India has been hotly debated for some time. The academic debates have ranged from psychoanalytic analysis of the location of the concept in the Hindu world view (Kakar: 1978; O'Flaherty: 1980; Obeyesekere: 1981) to the evaluation of the status of women in India (Dube: 1988, Dutta: 1990, Ganesh: 1990, Lakshmi: 1990, Basu: 1992, Sangari: 1993, Kumar: 1994, Dube: 1997). It is clear that popular culture, at least, reproduces constructs derived from Hindu cosmology within which a woman is viewed as *Samsarahetu*, the 'source of the world', the cause of the *Sansara*, the world (Meyer: 1971). Motherhood is extolled as the highest duty and women in this sense are viewed as 'born to be mothers'. The following passage from laws of *Manu* substantiates this view:

> To be mothers were women created, and to be fathers men; religious rites, therefore, are ordained in the Veda to be performed (by the husband) together with the wife (*Manu*: IX, 94, 96, 344).

Similarly *Manu* goes on to separate woman as a living cause of the very act of everyday life:

> The production of children, the nurture of those born, and the daily life of men, (of these matters) woman is visibly the cause (*Manu*: IX, 25, 27, 332).

A woman thus not only becomes a symbol, but also the *source* of the visuality of motherhood and fatherhood that has become such an integral part of married existence in India.[5] The reproductive responsibility of women is also closely linked to the proper discharge of worldly and other worldly duties which are to be shouldered by a woman alone:

> Offspring, (the due performance of) religious rites, faithful service, highest conjugal happiness and heavenly bliss for the ancestors and oneself, depends on one's own wife alone (*Manu*: IX, 25, 28,332).

In the Hindu normative order the twin concepts of womanhood and motherhood are conflated. One is inconceivable without the other, the two must occur in conjunction. Thus to realise her full potential and worth, the transition from woman to mother must be made; a transition mediated by marriage.

Marriage for Hindus is the first socially prescribed and proscribed step towards motherhood. It is a sacred duty on two levels. The bride giver (father) has a duty to give the daughter away in marriage on time, the bride taker (husband) has a duty to beget children from his lawfully acquired wife[6]:

> Reprehensible is the father who gives not (his daughter in marriage) at the proper time; reprehensible is the husband who approaches not (his wife in due season), and reprehensible is the son who does not protect his mother after her husband has died (*Manu*:IX, 3, 4, 328).

The rules for the father - the bride giver – are, however, more strictly encoded in various ancient legal texts. The laws of *Gautama* for instance state:

> A girl should be given in marriage before (she attains the age of) puberty. He who neglects it, commits sin *(Gautama*: XVIII, 21, 22, 269).

The code of *Vasishtha* goes a step further and states:

> As often as the courses of a maiden, who is filled with desire, and demanded in marriage by men of equal caste, recur, so often her father and her mother are guilty of (the crime of) slaying an embryo; that is a rule of the sacred law (*Vasishtha*: XVII, 71, 92)

The discharge of the sacred duty - to procreate after marriage - clearly has implications for the couple taken together. The pressure on the husband - the owner of the seed – is, however, held to be greater, as the woman as field is only a receptacle (of the seed). This is not to say that women are not pressurised but as we shall see in the next section the timing and the intensity of pressure is bound up with the male and female inputs and their potency. According to the cosmic division of labour the task of sowing the seed is that of the husband and the task of fertilising and nourishing it is that of the wife. The following two sections briefly consider these respective obligations.

A recurrent and emphatic rule for husbands, appearing in most ancient codes of law and in the two epics, is on the duty of a husband to visit his wife in *ritu*. *Ritu* implies menstruation in women and particularly the fourth day onwards, which even to this day in the Hindu view is considered the proper time for conception. Sexual union with a menstruating woman however is forbidden. To be in contact with a menstruating woman (*rajasvala*) and not a woman in *ritu* (*ritugamana*) is a dreadful sin. Interestingly the monthly flow is also construed as a great 'liberator' for women. The cleansing power of menstruation is considerable according to these textual sources. The legal codes of *Vasishtha* for example declare:

> A woman is not defiled by a lover, nor a Brahman by Vedic rites, nor water by urine and ordure, nor fire by consuming (impure substances).
> A wife, (though) tainted by sin, whether she be quarrelsome, or have left the house, or have suffered criminal force, or have fallen into the hands of thieves, must not be abandoned; to forsake her is not prescribed (by the sacred law). Let him wait for the time of her courses; by her temporary uncleanness she becomes pure.

> Women (possess) an unequaled means of purification; they never become (entirely) foul. For month by month their temporary uncleanness removes their sins (*Vasishtha*: XXVII, 17, XXVIII, 9, 1, 2-3, 4, 132-133).

Similar references are found in *Manu* and *Vishnu*.

The consequences of approaching and not approaching one's wife in *Ritu* are most explicitly laid down in the two Epics. *Ramayana*, for instance, mentions the evil-minded man (*dushtatman*) who does not let his wife have her rights, when she has bathed after the monthly cleansing (Meyer:1971, 217). The *Mahabarata* states that whoever does not know his wife carnally during the *ritu* must suffer the pains of hell. The *Garudapurana* accuses the man who fails in this duty as an embryo-slayer (*brudn hatya*). At the other end of the spectrum, those who do discharge this duty are not only extolled as virtuous but also as being on the path leading to heaven.

For the woman, on the other hand, marriage marks a new beginning, the essence of which is luicidly encapsulated in the following verse from the *Rigveda*:

> I loose thee from the shackles of Varuna (the warden of the moral law in the world) by which the kindly Savitar has held thee bound (up to now to thy father's family). Into the womb of the Rita,[7] into the world of good works, I set thee, together with thy husband (Meyer's translation: 1971, 140).

The verse clearly mentions a new life; a new family life accompanied with duties and obligations when it speaks of liberating the woman from the shackles of Varuna (keeper of 'virginity') into the '*Rita*' where the life and activity in the family would essentially entail - as discussed earlier - the fusion of the *khétra* with the lawful and legitimate *beja*.

Once the fusion of the *khétra* and the *beja* has taken, place the outcome - offspring - facilitates the transition of a woman into motherhood. The status of a mother is the subject of much glorification in the ancient texts. In *Mahabharata* the mother is described as:

> Of all guru the mother is the highest guru (I, 196.16)
>
> There is no higher virtue than the truth, no guru to equal the mother...(XII, 342.18)
>
> Above ten fathers or even the whole earth in worth (*gaurava*) stands the mother; there is no guru like the mother (XIII, 105.14)
>
> For all curses there are means of averting and destroying (*pratighata, moksha*), but for the mother's, and hers only, there are none (I, 37.3-5) (Meyer's translations: 1971)

The importance attached to the mother is understandable since her very essence - womanhood - as discussed earlier, is hailed as *Samsarahetu*, the 'source of the world'. Since she is the carrier (*dhatri*) and bearer (*janani*) of children she is also the source of family and the happiness that accompanies the birth of children.

Critiquing Altekar's (1959) assertion that the apotheosis of motherhood has reached a greater height in India than anywhere else, Bhattacharji (1990) argues that this apotheosis does not reflect the actuality of women's status in society but rather 'may be compensatory, seeking to recompense society's indifference to the mother (Bhatacharji: 1990, 51). Drawing extensively on ancient texts she traces the ritual aspect of conception, gestation, parturition and post-parturition stages in a woman's (mother's) life. She demonstrates how women were continually overshadowed by men and how all these rituals permitted to the much glorified mother were acts of self sacrifice and ritual observances for the well-being of the father and the son.

From the patriarchal *RigVedic* society to contemporary Hindu society motherhood has stood as a concept to which the wider socioeconomic and religious needs of a patriarchal culture attached themselves. This inherent inequity of ritual and social status between men and women becomes the subject matter of a wider cultural thinking where, inspite of the much exalted status of motherhood, the primacy of male *beja* over female *kshétra* always stands as a thorny subtext, a reminder of the

secondary place of the mother in an ethos dominated by the fathers.

The Epics are also very prescriptive about the very nature of reproduction and the primacy of male and female input into the creation of a new life. The important task of begetting children is accomplished when both woman and man contribute to the building of the body. According to the *Mahabharata*, bones, sinews, and marrow are contributed by father and skin, flesh, and blood come from the mother. There are several examples in ethnographic accounts of procreation beliefs that conform to this scheme. Madan's (1981, 1982) study of the Kashmiri *Pandits* is one such example. Madan found that the *Pandits* believed that:

> conception occurs when husband and wife reach orgasm simultaneously. Female orgasm is believed to result in the discharge of vital fluids into the womb, which also receives the male seed (bij). Not only were my informants uncertain about the nature of the supposed female discharge, some of them also considered it to be of no consequence. The male seed is believed to contain in it all the requirements for the making of the complete human being: bones, flesh, blood, all internal and external organs, hair, nails, intellect, knowledge, ignorance, health, disease. It has the capacity to provide for the nurture of the fetus and subsequently of the new born child. The mother's menstrual blood provides the soil or bed for the seed to grow in when it ceases to flow out and solidifies into the fleshy sack that envelops and nourishes the fetus (Madan: 1982, 105).

Similarly the Punjabis in Das's study believed that the bones of the child are formed by the father's semen and blood is formed by mother's blood (Das: 1976a, 3). The interesting aspect of these beliefs is that semen is understood as condensed blood. Dube (1986) observes that seed is contained in the semen which is said to have a relationship with blood. The child born, especially the male child, shares his father's blood and can in turn transfer it in due course to subsequent generations. The blood in this scheme, therefore, is made patrilineal. While women, in this worldview, are shown to contribute blood to the maintainance of the foetus, the social definition of the child born is marked by the presence of the father's blood. Dutta (1990) argues that 'motherhood is far from the liberatory and enriching experience it should be. The

concept is very much under male control, motherhood operates strictly within the material framework and is not autonomous. The mother can give birth but cannot give her child a social identity' (Dutta: 1990, WS-84).

The primacy given to the male seed (*beja*) as an agent of producing desired offspring and also the more important component of two reproductive fluids (blood and semen) contributed by the married couple can be traced to the laws of *Manu*, an aspect of which is also an important theme in the epic *Mahabharata*:

> On comparing the seed and the receptacle (of the seed), the seed is declared to be more important; for the offspring of all created beings is marked by the characteristics of the seed (*Manu*: ix,36, 35, 333).
> Whatever (kind of) seed is sown in a field, prepared in due season, (a plant) of that same kind, marked with the peculiar qualities of the seed, springs up in it (*Manu*: IX, 36, 36, 333).
>
> That one (plant) should be sown and another be produced cannot happen; whatever seed is sown, (a plant of) that kind even comes forth (*Manu*: IX, 37, 40, 334).

An interesting parallel to this ancient position on the metaphorical importance of seed is found in rural Andhra Pradesh in contemporary South India. To cite Dube again:

> If the physical appearance of a low caste boy and the quality of his intelligence and capacity for leadership, etc. attract attention as being incongruent with his caste status, people try to explain it by alluding to the history of his mother's illicit sexual relations with some powerful high caste man such as a Reddy or a Kamma landlord. 'After all if you sow seeds of lentils (legumes) you will not get a crop of gram' is the logic that conveys the message (Dube: 1986, 29).

There are two implications of this overriding tendency to assign primacy to the male seed. Firstly, from the point of view of property relations and inheritance, the issue of clear ownership entitlement is asserted and resolved. Possession of the field and its produce is centrally important to the wider socioeconomic needs of an order which accepts - with very few notable exceptions - the flow of property in the male line alone. The ancient laws of inheritance are very clear on this issue. Interestingly, the rule that the field must be given to one who has the seed is intimately related to the

notion of an unobstructed descent of a patrilineal group concentrated in a virilocal residence. The importance of the continuity of the male line can be gauged from certain codes of law like the *Narada* who go as far as to suggest that:

> Women have been created for the sake of propagation, the wife being the field, and the husband the giver of the seed. The field must be given to him who has seed. He who has no seed is unworthy to possess the field. The man must undergo an examination with regards to his virile [*sic*]; when the fact of his virile [*sic*] has been placed beyond doubt, he shall obtain the maiden, (but not otherwise) (Narada: XII, 22, 6, 19, 9, 169, 166).

The man according to this dictate is clearly unworthy of possessing the 'field' (woman) in the absence of seed and, therefore, also unworthy of possessing and transmitting the property. The woman/field in this sense becomes a 'primary' form of property, and also the agency of appropriating property of a 'secondary' nature.[8]

Secondly, the analogy between the male seed and the actual seed is made real by assigning it the mobility and detachment that the field does not possess. In the story of king *Uparicara* in *Mahabharata*, for instance, the seed was sent to his wife for impregnation at the time when he was away in the forest and his wife was in *ritu* (*ritusnata*) by means of 'pigeon post'. The ability to travel great distances to a woman in *ritu* to fulfill the sacred duty is the mode the Epics use to convey this message. Seed can be detached from its point of origin but a field can only receive it and fertilise it, a fact that makes the field dangerous and subject to strict male control and surveillance. A field - like a woman - in this discourse, therefore, does not make any distinction between the seed sown in it, it simply brings it to its logical conclusion[9]. These two issues will be discussed in greater detail in the next section.

The culmination of the union between the man (*beja*) and the woman (*khétra*) - the all important son - in the Hindu normative order marks the important shift in the woman/ marriage/ mother axis. The cog in this structure, narrowly defined as the son,

and at its broadest as offspring, connects the physical with the meta-physical. It is the task of making these physical and meta-physical connections that makes the son a very important requirement according to the Epics. This issue connects to a wider theme in the Hindu normative structure, that of the importance of children, sons in particular and the ways of begetting them. When dealing with the assigned importance of a son over a daughter, it is not enough to focus on the mother - caught between her own patriarchal indoctrination and the patriarchal expectation from the rest of the family, including the husband. The position of the husband/man himself is crucially important. According to most ancient texts - codes of law and the *Upanisads* alike - the son is the perpetuation of the self. The man, through the agency of his son, recreates himself; and in this sense is reborn as and in his son. In this context the *Aitareya Upanisad* speaks of three births of the self:

> In a person, indeed, this one first becomes an embryo. That which is semen is the vigour come together from all the limbs. In the self, indeed, one bears a self. When he sheds this in a woman, he then gives it birth. That is its first birth.
> It becomes one with the woman, just as a limb of her own. Therefore it does not hurt her. She nourishes this self of his that has come into her.
> She being the nourisher, should be nourished. The woman bears him as an embryo. He nourishes the child before birth and after birth, he thus nourishes his own self, for the continuation of these worlds; for thus are these worlds continued. This is one's second birth.
> He (the son) who is one self of his (father) is made his substitute for (performing) pious deeds. Then the other self of his (father's) having accomplished his work, having reached his age, departs. So departing hence, he is, indeed, born again. That is his third birth. That has been stated by the seer (*Aitareya Upanisad*: II. 1.4, 1, 2, 3, 4, 521).

This process, however, is most graphically described in the *Yogatattava Upanisad*:

> The breast that was sucked before he presses and finds joy; the vagina from which he was born before-he takes pleasure in that. She who was his mother before is now his wife, and she who is his wife is indeed his mother. He who was his father is now his son, and he who is his son will be again his father (Yogatattva Upanisad cited in O'Flaherty: 1980).

The obvious erotic and explicit incestuous overtones notwithstanding, we find a

theme that makes the life of a man permanent through the agency of his son; an open defiance of death. In the event of a man not reproducing himself in his son specifically, and in his offspring of any gender more generally, we find a situation where a man is faced with the possibility of a genetic death; complete oblivion. *Manu* similarly declares:

> The husband, after conception by his wife, becomes an embryo and is born again of her; for that is the wifehood of a wife (*gaya*), that he is born (*gayate*) again by her (*Manu*: IX, 13, 8, 329).

It is also a widespread belief in India that the ancestors themselves are born in the form of children[10]. The performance of *Shraddhas*, or the sacrifices for the ancestors, in the Hindu faith is one such way of recovering the lost spirits. The son, therefore, becomes an important player in this rescuing of the dead as it is through him that they would either win deliverance (*moksha)* or another opportunity to be regenerated to complete the unfinished tasks. *Manu* therefore states that:

> Because a son delivers (*trayate*) his father from the hell called *Put*, he was therefore called *put-tra* (a deliverer from Put) by the Self-existent (*Svayambhu*) himself (*Manu*: IX, 136, 138, 354).

The *Putra* or the deliverer from the hell called *Put*, comes to symbolise for a man a permanent existence, as his constant regeneration in his son would keep him away from hell, or alternatively the sacrificial duties performed by the son upon his death would liberate his soul and free him from the unending cycles of birth and death. In this sense, primarily, sons and more generally children of either gender[11] are very important contributions towards the Hindu notions of self worth, fruitfulness and salvation. Against this backdrop it is crucial to view the cultural expectation, as expressed in the desire for male children, as a feature of norms of patriarchal unilineal descent. Das Gupta et al (1998) have rightly argued:

> One dimension of men's pivotal role is that of the sustainer, which emanates from being defined as the appointed breadwinners, regardless of

> how much contribution women make to the productive process. Another dimension is that of the reproducer. This may sound strange, since it is women who bear children. But simply producing children is biological reproduction. Social reproduction requires that children be given an identity as members of an organised social structure. In a patrilineal society, it is the males who form the framework of the social structure. Thus the reproduction of the family, the household and of the society takes place through the male line: *it is men who reproduce themselves.* This is what underlies the symbolism of the masculine seed and the feminine earth: the woman, like earth, is merely a necessary accessory for the seed to reproduce itself [emphasis added] (Das Gupta et al.: 1998, 3).

Such institutionalised gender asymmetry is a 'potent' feature of Indian social organisation and significantly effects both the social and reproductive life processes of women. As the next chapter will show how such gendered inequity translates into the experience of social suffering wrought by infertility on women who bear the brunt of stigma and ostracism more directly then men.

A popular dialogue between *Bhima* and *Arjuna*, the *Pandava* brothers in the Epic *Mahabharata*, epitomises the importance attached to children:

> Three are the lights that mankind has: offspring, pious works, and knowledge; and when man is an unclean dead body, forsaken in the wilderness by all, then these three show their profit. For us now the light has been destroyed, by strangers having profanely touched our wife. How indeed could offspring come from a woman that has been touched? (Mayer's translation: 1971, 449-450).

The importance of this dialogue is two fold because at once its makes explicit the notions of female purity and the importance of offspring as having originated from a pure source. Equally the passage encapsulates the implication of having children and the consequence of not having them. These and some related themes will be explored in the next section.

Infertility: Infliction and Prescription

The implication of the seed/field dualism and its analogical importance has a profound impact on the lives of Indian women. Whereas fields can be barren there is no conception of a barren seed in the popular understanding of this dyad. Men are at

best viewed as incapable of sowing the seed but the potency of the seed itself is never in question. In this sense, infertility is never a male problem in India, a view which is only now being challenged.[12]

The subject of infertility or barrenness is of central importance to many of the ancient Indian texts. According to the laws of *Manu* a barren wife can be superseded in the eighth year of marriage (*Manu*: IX, 81, 81, 342). In *Mahabharata* once again we find similar sentiments expressed. Woman, according to this epic is *ratiputraphala*, i.e. woman with (sexual) pleasure and sons. A barren wife, on the other hand, is worthless; anything a childless woman (*aputrika*) looks on, gods and forbears will not accept as a sacrificial offering because her very look (shadow) would stain the offering. *Mahabharata* also mentions that the gifts that are made by a woman without husband and children rob the receiver of his life-powers (Meyer: 1971, 155-56). In the main narrative of the *Mahabharata* itself we find several central characters inflicted with the pain of infertility. The theme of infertility is a source of many a rich dialogical exchanges between the central characters of the Epic. King *Pandu* for instance bewails his sorrow to the holy men:

> For him that has no offspring no door to heaven is known or is named; this torments me. I am not free of my debt towards my forbears. When my life is at an end, then it is the end of my fathers [13](Meyer's translation: 1971, 149-50).

The concept of *adharmika* or godlessness is exclusively reserved for men who are son/childless, and therefore to carry on the blood is the highest duty and virtue according to the epic. According to certain *Puranic* sources like the *Garudapurana* a man who has died childless becomes an evil ghost (*Pretakalpa*).

The centrality assigned to progeny and the active role assigned to them in ordering the Hindu cosmology (and notions of order) makes the task of overcoming infertility through purely cultural means an important part of the ancient *Vedic* and

post-*Vedic* society. The legal codes and the scriptures alike deliberate over the thorny problem of lawfully begetting children from infertile couples.

The Hindu notions of ordering the social universe on the pattern and rhythms of the cosmic universe play a crucial part in determining the ideas of normality and desirability. The cosmic symmetry, order and rhythm which became the harbinger of the *Vedic* philosophy and much of the *Rig Veda* comes to bear severe pressure on the notions of duty/*dharma*. *Dharma* as a concept is polysemous: encoded with a multiplicity of meanings. Attempts to define the term have often stopped short of grappling with the exact meaning the word *dharma* encapsulates. O'Flaherty and Derrett (1978), therefore, define *dharma* as a problem, a concept which is vague, indeterminable, impossible to define 'without broadening it into useless generality or narrowing it to exclude valid instances' (O'Flaherty and Derrett: 1978, 14). Sudhir Kakar (1998) on the other hand defines *dharma* as the 'means through which man approaches the desired goal of human life' (Kakar: 1998, 37). Commonly the term is translated to suggest 'duty', 'right action', 'morality' etc. While each of these translations define one or more aspect of *dharma*, the meaning in its entirety remains elusive. Like many similar philosophical concepts that Hinduism has assimilated over the centuries, the true meaning of *dharma* escapes in an attempt to define it. *Dharma* can at one level be understood as a social cement holding individual and society together and a 'ground-plan of an ideal life cycle in the sense that it defines the tasks of different stages of life and the way each stage should be lived' (Kakar: 1998, 40-42). On another level human *dharma* can be understood as carved out of a perceived *dharma* of the wider cosmos. This gives us a sense of how the expectation of discharging one's duty as a social being, modelled on the cosmic bodies, became the basis of *acharan* or conduct. Just as *Surya* or the sun's *dharma* or duty is to rise in the

East and set in the West, so it is ordained on this earth for the worshippers of that cosmic sun God to be unflinching in discharging their worldly duties in the same orderly manner, and thus prepare the ground for an otherworldly existence. Any breach in the cycle of order and structure according to this worldview would be tantamount to the heavenly bodies colliding in the far depths of the universe.

Infertility in this sense becomes one amongst many other breaches in the orderly flow of the social and a source of nothingness out of which the creator sculpted the *prithvi* or earth. Hence, the act of living for most Hindus becomes a precarious balancing act between the two extremities of social meaning and nothingness. It is therefore not surprising that the contemporary Hindu way of life - as with the category 'Hindu' itself - has been generated from the powerful and contradictory forces of conformity and opposition, an overt flexibility that allows for improvisation in the pursuit of sociocosmic solutions. The implication of this eclectic approach to social life, then, becomes an integral part of a *dharma* ordained lifestyle. To cite Kakar again:

> ...sense of *dharma* as the spirit rather than the content of activity is, I believe, related to the individual Hindu's notable tolerance of lifestyle other than his own. Hindus tend to accept casually deviance or eccentricity which in the West might be anxiously labelled anti-social or psychopathological, requiring correction and cure (Kakar: 1998, 39).

An obvious corollary of such flexibility came to be a social engineering of 'codes of action and modes of conduct' that repaired the cultural and cosmic complications produced by infertility. These codes and modes were crystallised in the practice of *Niyoga* or conception by proxy. *Niyoga* in its strictest sense was:

> [the] appointment of a wife or widow to procreate a son from intercourse with an appointed male (Kane: 1974, in Sutherland: 1990, 77).

According to the laws of *Manu*:

> On failure of issue (by husband) a woman has been authorised, may

> obtain, (in the) proper (manner prescribed), the desired offspring by (cohabitation with) a brother-in-law or (with some other) *Sapinda* (of the Husband) (*Manu*: IX, 59, 59, 337).

It is, however, important to understand that the improvisational approach[14] to create sociocosmic solutions, opens many contradictory pockets in the *Vedic* normative structure. In this concluding half of the chapter it will be argued that these contradictions present us with even more significant accommodations and flexible maneouvres towards synthesising them with cultural notions of order.

Doniger (1995) views the presence of contradiction resulting from the practice of *Niyoga* primarily in terms of a sibling rivalry 'in absentia'. According to her:

> legally and biologically, the person you most want to have sex with your wife, when you are dead, is your brother, because he has your genes. But psychologically, the last person you want to have sex with your wife, even when you are dead, is your brother, because of sibling rivalry (remember Jacob and Esau). For this reason the *niyoga* is the most liminal form of Hindu pseudomarriage, poised on the volatile fault line that distinguishes and connects marriage and adultery: *niyoga* is paradigmatic in myth but stigmatized in *dharmasastra*, secretly longed for but publicly disavowed (Doniger: 1995, 173).

Doniger's argument on the liminal nature of *Niyoga* exposes the contradiction that eventually signaled the demise of this practice.

The *Niyoga* style of engendering fertility had an interesting implication, one which was at an obvious variance with the notion of barren field and potent seed. For this practice in fact implied recognition of a barren seed or an absent seed. The practice was clearly designed to overcome the lack of seed, whatever its cause, rather then as a solution for barrenness of the field. The male (phallic) centric universe had simpler solutions for barren fields - one of replacement. The male element on the other hand is impossible to dispense with, because of the clear ownership and entitlement rights given to him.[15] This however did not compromise the ownership entitlement of the man in whose name the surrogate male was appointed. The laws of

Manu clearly state this:

> As with cows, mares, female camels, slave-girls, buffalo-cows, she-goats, and ewes, it is not the begetter (or his owner) who obtains the offspring, even thus (it is) with the wives of others.
>
> Thus men who have no marital property in women, but sow their seed in the soil of others, benefit the owner of the woman; but the giver of the seed reaps no advantage (Manu: IX, 48, 48, 51, 336).

The centrality of male control and hegemony is of core importance to this discourse. In the presence of a potent seed - as we saw above - primacy is given to the male seed, but in its absence field becomes all important. In either case the control remains with the owner of the field. There was, however, a glaring lacuna in the *Niyoga* model: it compromised the much cherished notions of purity and monogamous devotion (*pativrata*) of a wife towards her husband.

As argued earlier, *Manu* extolled the mother as the site of fusion of *beja* and *kshétra*. We also saw how the concept of motherhood places a mother on a par with Goddesses who are in turn addressed as mothers, and therefore any woman not living up to the ideology of motherhood and the purity associated with it stands stigmatised and referred to as a barren field. The problem with the *Niyoga* model was that it compromised the purity of the very concept of motherhood. Purity is central to the very being of women according to the ancient textual sources. To understand the demise of the practice of *Niyoga* it is important to understand how the ideas of purity developed in a later Hindu ideology which locates this purity narrowly in the virginity of a woman but more broadly in her religious devotion to her husband. It is interesting to see that a primary and secondary level distinction can be made in the case of female virginity as articulated in this ideology. It is argued that depending on how a woman conducts herself - *dharma samvat acharan* - her purity which is rooted in her virginity is made culturally permanent. That is to say, a pure woman never

loses her virginity in the Hindu conceptual and normative order. As a girl or *kanya* the purity is rooted in the assumed biological virginity. This can be referred to as primary virginity. When a transition is made from a *kanya* to *suhagan* or a married woman, the woman also makes a transition to secondary virginity. Khare's (1982) formulation is that whether the referents of virginity are physical or biological, it is always a formulation of *dharma* within the Hindu system. That is to say a *kanya's* virginity is basically understood as a state of *dharma* rather than as merely a physical condition of continued sexual celibacy. Even though there are legends and mythological heroines in the epic *Mahabharta* who conceive through the means of divine male surrogacy as *kanyas* or *suhagins*, i.e. as married women, their actions are considered unblemishing because of their divine or quasi-divine status.[16] As Leach (1976) claimed, a woman impregnated by God remains a virgin even after giving birth. This immediately clarifies the notion of secondary virginity. As a married woman and even after having achieved the status of a mother the woman continues to be considered culturally pure and therefore 'as if a virgin' because impregnation achieved with one's *pati-parmeshwar* (god-husband) bestows divine purity or a quality equivalent to immaculate conception. The Hindu ideology of *pativrata* or literally, she who takes a vow [*vrat*] of devotion to her husband [*pati*] (Harlan and Courtright: 1995, 8) was clearly instilled in the ancient religious laws of *Manu*, which still hold considerable sway over Indian women (Dhruvarajan: 1989). *Manu* clearly spelt out the duty of a virtuous wife as one who serves her husband and treats her husband as God or *pati permeshwar*. These conceptions are important because it is around these that cultural ideas about one's personhood and sacredness are created. *Niyoga* declined because the practice came into conflict with 'these' ideals of purity.

There are therefore two contradictory models of fertility - the *Niyoga* model and

the brahminical Virgin model. In the previous section the exchange between *Bhima* and *Arjuna* gives a sense of how contentious the issue of compromised purity of a wife can be in relation to the future (unborn) progeny. The importance of female purity assumes even more significance once women are viewed as, in Veena Das's words, 'points of entrance, "gateways", to the caste system' (Das: 1976b, 135). This meant that no man of a lower caste status could access a higher status woman, as that would endanger the purity of both the woman and the caste group. Similarly Harlen and Courtright (1995) argue that:

> the purity of women is especially crucial to the maintenance of the position of the family within the social hierarchy...because responsibility for maintaining the blood purity of the husband's line falls heavily upon the wife...(Harlan and Courtright: 1995, 6).

The main threat to the caste group in this sense came from female sexuality, and gradually this control extended to include the control of women within the caste and agnatic group. Such entrenched views paved the way for stricter male control and surveillance of women as the notion of guarding one's property gained further momentum. The guarding of the woman/ property (field) dyad thus became conflated with guarding the purity/ virginity/ *dharma* triad. The decline of *Niyoga* is intimately linked to this subtle ideological shift. *Niyoga* disappeared but the new Virgin model manoeuvred itself to usurp the idea of ownership of the field, which was the central organising principle of the *Niyoga* model. In the new model, therefore, the pure field was to belong to the owner of the seed and the field only.

The contradictions produced by an improvisational strategy must be grounded in some commonly acceptable notions of *dharma* if a sociocosmic crisis is to be averted.

The Models	
The Niyoga Model	**The Virgin Model**
Flexible	Rigid
Impure	Pure
Turns loss [of purity] into gain [offspring]	May sacrifice gain [offspring] for purity
Creates visuality of fertility	May or may not create visuality of fertility

The *Niyoga* model may have created a contradiction by compromising the purity and sacred dimension of marriage, but it was flexible enough to turn this loss into a gain by creating a visuality of fertility. On the other hand, the decline of *Niyoga* and its replacement by the Virgin model was a means of resolving a contradiction that could have posed an open challenge to the acceptable principle of *dharma* in its social and cosmic dimensions. It is sometimes suggested that the practice declined as a response to a general waning of the human capacity for righteousness, which made it impossible to sustain the rigour of moral intention and the sexual detachment necessary to avoid lapsing into adultery or incest (Sutherland: 1990, 80). Little wonder *Niyoga* was always associated with divine and quasi-divine beings or their embodiment on earth, the Brahmins, as they were thought to have the moral rigour and purity of intent, an absolute requirement for the practice. *Manu* remained uncertain about the merits of the practice and there are contradictory views on its desirability, which can be attributed to the multiple authorship of the text, and to its gradual evolution. However, the issue of waning morality remained central to the justification for discontinuing the practice. *Brihaspati's* legal code (thought to be first century A.D) assimilated this presumed lack of morality into the epochal theory:

> The Niyoga (appointment of a widow to raise offspring to her deceased lord) has been declared by Manu, and again prohibited by the same; on

> account of the world, it must not be practiced by mortals (in the present age) according to law.
> In the ages Krita, Treta, and Dvapara, men were imbued with devotion and sacred knowledge; in the (present or) Kali age, a decrease of its power has been ordained for the human race (Brihaspati: XXV, i, 12, 13, 369).

Later legal views on the issue completely reject the use of *Niyoga*. The *Vijnanesvara* (between 1121 and 1125 A.D) and *Sarasvati-vilasa* codes (16th century A.D) reject the concept of *Niyoga* and assert the woman's right to inherit property, for instance, without husband/son (Sontheimer: 1977, 134, 151).

Citing Kakar (1990), Doniger (1995) makes a strong case for the persistence of the idea of *Niyoga* in contemporary India:

> ...Though the custom gradually fell into disuse, especially with the prohibition of widow remarriage, the psychological core of niyoga, namely the mutual awareness of a married woman and her younger brother-in-law as potential or actual sexual partners, is very much an actuality even today.
> ...In clinical practice, I have found that women who are on terms of sexual intimacy with a brother-in-law rarely express any feelings of guilt. Their anxiety is occasioned more by his impending marriage, which the woman perceives as an end to her sensual and emotional life (Kakar: 1990 in Doniger:1995).

The psychological explanation for continuing *Niyoga* undercurrents in a married woman's relationship with her brother-in-law appears inadequate for the purposes of understanding this social phenomenon. What Doniger and Kakar overlook is the important role played by kinship structures in the articulation of a relationship of 'privileged familiarity'; a Radcliffe Brownian (1940, 1949) 'joking relationship' between a woman and her younger brother-in-law. The common term for the younger brother-in-law in most parts of north and central India is *devar*. According to Irawati Karve (1968):

> The word devar occurs many times in the Vedas. In the marriage hymn, gods are exhorted to make the bride loving to the *devar*. Elsewhere, the *vidhava* (widow) is mentioned as leading the *devar* to the bed...the way in which *devar* is connected with *vidhava* and used in bridal hymn suggests

> that he had sexual relations with the bride and that he had either the right or the duty to marry (?) [*sic*] the widow of his elder brother (Karve: 1968, 34-35).

However, an important oversight in most accounts on the subject lies in ignoring the kinship term - *devar* - itself. In Sanskrit the term *devar* can be split (*sandhi-vichhéd*) into two distinct words 'dvij'+'var', which can roughly be translated as the 'second husband'. The perpetuation of a kinship term which literally inscribes the potential (husband) status of a man onto his social identity, and the social accommodation of a relationship of over-familiarity (especially on festive occasions like *Holi* in some parts of India) reinstates the sexual nature of the relationship that once marked their social interaction. Without adequate sociological research it would be hasty to relegate the entire issue to the deep recesses of the human psyche.

Conclusion

The importance of fertility in the Hindu worldview is deeply rooted. The ancient textual sources amply testify to the quasi-sacred nature of human fertility. Infertility, therefore, disrupts not only the procreation of corporeal being, but also destabilises the meaning giving cosmology.

The gendered nature of the reproductive model, on the other hand, that views male and female contributions as qualitatively different to the process of procreation reinstates the gender inequity by relegating women to a more subordinate role. The importance attached to the 'male seed' over the 'female field' make women more vulnerable to the charge of being barren or incapable of fertilising the seed. Though apparently these themes originate in ancient texts, law codes and myths, they do echo in contemporary Indian settings. Whilst anthropological and sociological studies show how these ideas are understood in different parts of India, popular culture – especially through the dramatisation of the Epics – has succeeded in disseminating

these ideas to an unprecedented number of Indians.

What implications do these ancient norms and ideas have for contemporary seekers of infertility treatment? Is it fair to argue that much of this ancient paradigm still holds sway over individuals and structures their response towards their infertility and its treatment options? By alluding to heuristic – *niyoga* and virgin - models we can at best expose at an esoteric level the ideological and normative traditions that structure the Hindu notions of fertility and its absence. Though there are some emerging indications in this research (chapter 8) that suggests that the 'tradition of *niyoga* birth' provides a potential ideological basis for accepting new reproductive technologies and this necessitates further research before more potent links can be made. What has emerged with clarity, however, is that there are deeply rooted cultural ideas that make infertility an emotionally debilitating and socially stigmatising condition. How couples experience accentuating stigma in the face of eluding conception is the subject of the following chapter.

Notes

[1]It may be an interesting research issue to explore whether this spread of a classical metaphorical concept of procreation is indicative of a wider process of 'Sanskritaization' (Srinivas: 1989).

[2]According to him "This belief in the common pattern of fertility between women and Mother Earth accounts for the conception of menstruating Goddesses in different parts of India." He gives several examples. In the Punjab, mother earth sleeps for a week in each month. In the Deccan, after *navaratra*, her temple is closed from the tenth to the full moon day while she rests and refreshes herself. A similar rite of purification is made, according to him, in the temple of the Goddess Bhagavati in Kerela. In the Malabar region, mother earth rests during the hot weather until the rains. In parts of India great importance is attached to the menstruation of Goddess Parvati. Similarly, the menstruation of Goddess Kamakhya in Assam is considered very important.

[3]In the Hindu worldview Gods are very often created in the image of man. According to O'Flaherty, Hindu Gods are "often imagined to be men, to be like men in character...as ludicrous men, men who exhibit all the lowest weaknesses of men... Hindu gods (even uppercase [*sic*] gods like Siva and Vishnu) begin, by the medieval period, to become not merely human but banal"(O'Flaherty: 1980, 72). It is therefore not surprising to see women, because of their maternal role, being equated to Goddesses, and Goddesses are shown to be like women because they are referred to as mothers.

[4]According to Krishnan 'a Madras based Muslim entrepreneur is engaged in subtitling the Ramayana in English, describing this as a labour of love and an act of faith. A Muslim professor of the Jawaharlal Nehru University in Delhi commented that the story of the Ramayana embodied some universal values, and that his family, including his two young sons, were regular viewers. A neighbour travelling to Najibabad in Utter Pradesh found her train compartment, one Sunday morning, full of Muslim women,

regretting that their travel had caused them to miss that week's broadcast of Mahabharata' (Krishnan: 1990, 114).

[5]As we shall see in chapter 7 that there is an oppressive cultural expectation that demands fertility as a logical corollary of married existence. Most couples interviewed complained that social pressure to have children and seek medical help had become a major part of their infertile existence.

[6] Many anthropological accounts have identified an underlying asymmetry between the status of bride givers and bride takers, where the latter are held to be in a superior position in relation to the former. While Gray (1980) describes this inequity in hierarchical terms, Östör and Fruzzetti (1995) defend their position by describing the relationship as one of unequal gift giving.

[7]According to Meyer's translation 'Rita' is: "The natural and moral law, governing the whole world, and, according to the Indian belief, having its origin and most important centre of life and activity in the family"(Meyer: 1971, 140).

[8] Patricia Uberoi (1996) has shown, in the case of the Hindu Marriage Act in contemporary India, that a judicial *ethnosexology* justifies the 'legal requirement for consummation to establish the validity of Hindu marriage by recourse to naturalistic explanations of the physical and emotional effects of the act of consummation' (Uberoi: 1996, 185). The present day Hindu Marriage Act fundamentally departs from the *Dharmasastric* provisions by separating potency and sterility. Whilst potency can be a valid ground for nullity – an inability to sustain erection on the part of man and for a woman to be unable to receive it *to some degree* – male/female sterility is irrelevant to the legal notion of potency. Though as Uberoi argues 'judges routinely affirm that the procreation of children is one of the principal aims of marriage; that women have an innate desire for motherhood, which in the proper course should be satisfied...' (Uberoi: 1996, 201). These tensions can be located in a much wider debate surrounding Hindu marriage as sacrament versus contract.

[9]An alien seed is like a wild weed growing in a field. Therefore a woman is construed as needing protection, even surveillance, against weeds (alien *beja*) finding their way into her womb.

[10]Interestingly, according to the *Garbha Upanishad*, the child in the womb remembers its past existences and on contact with the wind of the outer world - upon its birth - it loses that knowledge. The cries of a new born infant in many parts of India are therefore interpreted as a vocal protest and moaning of a loss of sacred knowledge of the self and the cosmic mysteries.

[11] The laws of Vishnu for example state that a son of appointed daughter who is given away by her father with words, 'the son whom she bears be mine', can act as the 'son of the body'. Thus female children become a vehicle of obtaining grand sons who can act as defecto sons.
[12]The patient interviews bring out this shift in perception about the omnipotent male seed. Men interviewed at the clinics were frank and open to admit that their sperm counts were low. Even clinicians were unanimous in expressing satisfaction at a significant shift in the male attitude towards male infertility. Several doctors interviewed felt that this awareness had to trickle down as the bulk of the infertile are still inaccessible because of false conceptions about the power of the male seed.

[13]Similarly *Pandu* sadly speaks to his wife *Kunti*:

> Offspring, indeed, is the abiding-place in the worlds that concords with the law. I have sacrificed, given alms, practiced asceticism, thoroughly carried out vows of mortification, but all this, it is declared, does not purge the childless man of sin. I, a childless man, shall not reach the pure, fair worlds (Meyer's translation: 1971, 150).

Elsewhere in the *Mahabharata* in the story of king *Uçinara, Galava* speaks to him:

> Thou art childless; beget two sons. In the boat of 'son', ferry thy forefather and thee thyself over to the shore. For he that partakes of the fruits of sons is not cast down from heaven, nor does he go to the dreadful hell like the sonless (Meyer's translation: 1971, 150).

Elsewhere in *Mahabarata*:

> For men yearn for sons to this end: Who shall save us from sorrow? For their own good do fathers yearn after sons, who with friendly hearts bring them salvation from out of this world in that beyond (Meyer's translation: 1971, 150).

Likewise, numerous references to the importance of sons/children in the epic form a significant part of the core narrative:

> To make offerings to the gods, to give alms, to study the holy writings, and to sacrifice with abundant sacrificial gifts, all this is not worth a sixteenth part so much as offspring. Whatever he brings about with many vows and much fasting, all is fruitless for the childless man.
>
> The sacrifice in fire, the three vedas, and the propagation of the family are everlasting. All of them (that is, of the other things) are not worth a sixteenth part of a offspring. So it is among mankind, and just so among creatures. Thus it is. What is called offspring, that it is which is the threefold Veda of the ancients, and of the godheads that which lasteth for ever.
>
> Three are the lights which man has on earth: children, deeds, knowledge.
> Let a man wed and beget sons, for in them there is a profit greater than any other profit (Meyer's translation: 1971, 150-51).

[14]The term improvisational approach does not mean that the flexibility meant relaxing of control and rules. On the contrary the process of improvisation is resorted to so that the rules can be sculpted and made more affective in the face of a *dharma* crisis.

[15] There is a prevalent saying in India: if a son dies, that is the end of the line; but if the daughter-in law dies there will be a marriage in the house (Dhruvarajan: 1989).

[16]All the mythological heroines remained virgins because of their own pure qualities and devotion towards their husbands. Drupadi in the epic *Mahabharta* regains her virginity five times so that she could be pure for each of her five husbands. Likewise Kunti remained chaste because like a dutiful wife she begetted sons from the gods upon being implored to do so by her husband. It can therefore be argued that, more then their quasi-divine status, these women remained pure because of their religious devotion to their husbands and by conforming to their every wish, even requests for begetting through the practice of *Niyoga.*

Chapter :7:
Gendered Conceptions: Gender, Stigma, Blame & Infertility

When the first song was over, Ram Lakhan Yadav, a man of about thirty who had been sitting at the back, taking no part in the *faag*, rose and picked his way through the singers towards the gap between the two groups where the percussionists were sitting. He was carrying a pair of cymbals.

Chote Lal Yadav said, '*Arre bhai*, sit down, we don't need any more cymbals. Two are quite enough. If you too come in now, we won't be able to make ourselves heard above all the banging and clashing.'

A young man, Hoshiar Singh, sneered, 'Get out of here, Ram Lakhan. *Holi*'s the season for cutting the crop – and where's your crop? Don't you know how to plough? Something wrong with the seed? Didn't you irrigate the field? What's the problem? People like you bring us bad luck. We'll have poor crops this year if you play *Holi* with us. Wait until your house produces some children before trying to play those cymbals.'

Ram Lakhan pulled the young man to his feet and punched him in the face. Before a full-scale fight could develop the singers were on their feet, pinning back the arms of the two men. Ram Lakhan was frog-marched off the veranda and given a parting kick to see him on his way.

In the small inner courtyard of the house next to Ram Lakhan's his wife was standing against the wall watching women pressing the pastry for *gujias* into moulds and frying *papadums* and *kachoris*. A child darted to the pile of freshly cooked *gujias* and stuffed one into his mouth. His young mother caught him up in her arms, hugged him and said, 'What will we do if you go on like that? The men will be very angry if there are not enough *gujias* for everyone who comes to the house today. They will smack you if I tell them what the problem is.'

There was a tussle going on in another corner between one of the brothers of the house and his younger sister-in-law. She was trying to stop him pouring a pot of coloured water over her, but let go of the pot for one moment to prevent the border of her sari from slipping off her head and found herself drenched with yellow dye.

Ram Lakhan's wife thought, 'I have no brother-in-law to play *Holi* with, no children to hug. I look like all these women here. I've got the same gold nosepin, the same bangles, the same silver anklets. I wear the red *sindoor* of a married woman in my hair. But really I'm nothing like them because I have no children, and there's no family in our house.'

> Rani and Sima, two of the younger wives of the family, came over to her. Rani asked, 'Why don't you have any colour on your face or your sari? Doesn't anyone play *Holi* with you?'
> Sima giggled and said, 'Nobody plays *Holi* with a barren woman. It brings bad luck.'
> Ram Lakhan's wife stared silently at the ground.
> Sima poked her in the ribs and asked, Have you been sitting under our mango trees? They should be flowering now, but they aren't, and people say that if a barren woman sits in a mango grove, the trees won't flower.'
> Both giggled like schoolchildren they really were, and Rani said, 'Come on, we are wasting our time. Her mouth is closed as tight as her womb.'
> Ram Lakhan's wife walked around the edge of the courtyard, her head turned towards the wall, until she reached the front door. No one noticed her going. It was as if she had never come to play *Holi* with her neighbours.

This passage from Mark Tully's collection of short stories, *The Heart of India* (1996) clearly reveals the gendered experience of infertility in India and yet as a social scientific concern in India 'infertility' continues to remain conspicuous by its absence. There are only fleeting references to the issue of infertility in studies on family, gender, reproductive and fertility issues (Madan: 1965, 1976, 1982, Das: 1976a, Jeffery et. al: 1989, Patel: 1994). With the notable exception of Neff's study of the matrilineal Nayars in South India (Neff: 1994) and recent papers by Unisa (1999) on the psychosocial consequences of childlessness, Mulgaonkar (2000) on treatment-seeking behaviour amongst the urban slum populations in Bombay, and Riessman on the experience of infertility amongst women in Kerala (Riessman: 2000), there appear to be few social or anthropological studies of infertility and its status in a pro-natalist culture. This is an important gap in an otherwise in-depth sociological understanding of reproductive and fertility behaviour in India.

This chapter attempts to look at infertile bodies - male as well as female - with a view to revisiting feminist/sociological understandings of 'gender' and 'stigma' in relation to infertility. The chapter locates the issue of childlessness in a wider cultural context that ostracises infertile bodies, and in doing this it endeavours to show that the

actual reality of living with infertility is more complex and that the stigma of infertility can attach itself to a married couple. This necessitates further research and critical reflection on the finer processes of stigma ascription.

Stigma and Infertility

'Stigma', according to Goffman, results either from physical deformities, individual character deformities or deviation from the group identity (Goffman, 1963). Miall (1985) has suggested that infertility is more closely associated with Goffman's physical deformity classification, whereas Whiteford & Gonzalez (1995) view stigma associated with infertility as based on a sense of having broken a group norm. They argue that this is particularly true of a pronatalist, medicalized society 'where the only external expression of infertility is the absence of children' (Whiteford & Gonzalez, 1995, 29). Scott (1978) on the other hand argues that the '...stigma (of infertility), carries with it a series of moral imputations about character and personality...the fact that...stigma leads [non-affected people] to regard [the affected] as their moral inferiors' (Scott, 1978, 385 in Whiteford & Gonzalez, 1995, 30). This clearly locates the stigma of infertility in attributed individual character deformities, thus pointing to the rather lithe character of Goffman's thesis and its ability to contain theoretically, any position on the subject of stigmatization resulting from infertility.

Some aspects of Goffman's approach, however, are now being questioned in non-Western settings. Reissman (2000) in a recent paper has critiqued the Eurocentric assumption in Goffman's model that individuals who find themselves in potentially stigmatizing conditions strategically manage information about themselves. She instead argues that:

> The theory (a product of Western thought) assumes a self-determining, autonomous individual with choices and a mass society that allows for privacy – in Asian contexts, these are problematic assumptions...(Reissman: 2000, 113).

For infertile South Indian women, selective disclosure of an 'invisible' attribute (infertility) was not an option, as they were repeatedly questioned about their family status in a variety of public and private contexts (Reissman: 2000, 118). Data from the present study similarly suggests that *the luxury of selective disclosure is seldom available to infertile men and women in the Indian context.*

Unlike in the Western settings infertility ceases to be a 'secret stigma' (Greil: 1991) since in a patriarchal pronatalist context the absence of children in a marriage becomes more visible than their presence. To understand the stigma of infertility in India it is important to effect a fundamental distinction between 'stigma' and 'blame'. While women may be blamed for being barren or men (more rarely) for being sterile, stigma can penetrate and attach itself to a married body. In other words whereas blame remains specific and the primary site of female (and sometimes male) oppression, the stigma of infertility is more widespread and can expand to include the man and woman in an infertile union. Stigma in this sense becomes what Kleinman calls '*sociosomatic*' resulting in the '*delegitimation*' of the stigmatized rather than rendering their social identities spoilt (Kleinman: 1995 et al.). That is to say that, though stigma – like in the West – remains a moral category, the process of delegitimation affects the person, the family and all aspects of social intercourse. In the case of infertility this amounts to either remedying the continuing absence of children by recourse to social intervention (which could, for example, be medical) or the creation of social distance between the affected and the rest of the familial unit, lest the

'moral blame' extend to implicate the conjugal unit or family. As discussed below, the latter recourse is predominantly evoked in the patriarchal familial context in India, where a woman's substitutability on account of her inability to contribute living members to the family and to the society at large is punished – regardless of the cause of infertility – by the real threat of abandonment. Marriages that resist such 'normative prescriptions' to manage infertility find the process of *delegitimation* affecting all aspects of their social interaction.

In what follows the gendered experience of infertility and its associated stigma is examined further, with a view to 'privilege the suffering' wrought by its social unfolding which risks obfuscation if *somotised* as mere disease (Kleinman: 1995). In doing this, the chapter examines the suffering ensuing from the stigma associated with infertility, both as it has come to be represented in the social-anthropological accounts, and in the narratives of the couples most severely affected. It emerges that, rather than be passive victims in the face of stigma, couples may resist and 'disavow dominant perspectives' (Riessman: 2000) about the right course of socially responsible action in the face of failed conception.

What is the Gender of Infertility?

In India infertility is often construed as a female problem. What little has been written on the subject clearly reflects this. Tulsi Patel (1994) in her study of fertility behaviour in a Rajasthan village argues that barrenness is considered a 'dreaded condition', 'a curse', and also cause for 'emotional and social doom' for a woman (Patel, 1994, 78). According to Patel:

> In a male dominated society a barren woman's status gets further lowered as it is always her fecundity that is doubted. Rarely is male fertility

> questioned. Men are rarely expected to undergo fecundity tests while a few women [*in her study*] have been made to do so when they did not bear any children for several years after marriage (Patel, 1994, 78).

Jeffery et.al's (1989) study of women and childbearing in North India similarly found that 'to fail to conceive or to have no living children' was usually 'calamitous' for a woman (Jeffery et.al, 1989, 87).They argue that:

> In bearing children, especially sons, the bahu [*daughter-in-law*] continues her husband's line and provides the chaulha [*hearth*], future generation of workers. Failure is just cause for a man to return his wife to her parents and several women in Dharmnagri and Jakri (who ultimately bore children) recall worrying times when their husbands were pestered to replace them (Jeffery et.al, 1989, 87).

There is a similar observation in Madan's (1976) account of 'Hindu women at home' who fear not only rejection but the threat of divorce on being considered childless:

> Having been married, a wife is next expected to prove her worth by bringing forth children, if not sons, at least daughters. A barren wife is no good. We have an incident reported from the life of a West Punjab Hindu doctor, educated in England, who was married in 1925. The biographer, the doctor's own son, describes how his mother was still not pregnant after two months of marriage. Her parents persuaded the doctor-husband to have her examined by a gynaecologist who pronounced her incapable of conception. When they returned from the doctor's office, Mamaji clasped her hands and said "do with me what you like, but don't send me back to my parents".
> "What are you taking about?" [asked daddyji]
> She said she knew that a woman was like a pair of shoes – when she wasn't useful a man threw her away and got another...
> "Please take a second wife", she begged. "I will stay in the house and be a sister to her, and look after your children".
> "That may be the practice among city people, but not among us country people", he said.
> "But we Hindu women are like breeding cows," she said, between her sobs. "Our value is in our sons".
> Luckily for this lady, she bore her husband several children, including the renowned author of the biography I have quoted from, namely, Ved Mehta (Madan: 1976, 76-77).

The incident dates back to the early half of the twentieth century but it is not too far from the contemporary Indian reality in the twenty first century. The episode above ties in with the gendered understanding of fertility and infertility as explored in

chapter 6, however there is some emerging evidence in this research that suggests that the lived experience of infertility is more complicated. There appears to be a subtlety in the way gender is understood by the infertile and how the idea of gender is drawn upon to make sense of their predicament. For instance, there was no firm basis for seeing infertility in terms of a stark gender contrast. Whether the cause of infertility was male, or female, the couple was 'in it together'.

Fieldwork in one of the North Indian IVF clinics provided access to confidential patient correspondence files. Many painful letters detailed the suffering couples were having to endure on account of the stigma surrounding their condition. One letter in particular stood out as significant in its reference to the issue of societal pressure to remarry. Its author was a junior railway clerk residing in a small town in economically backward north Indian state of Bihar. Though the letter was written in Hindi a small excerpt is translated below:

> ...Doctor *sahib* please help us, God will bless you with a long life and good fortune. We are fed up of this existence. Everybody tells me to get married again but I love my wife dearly and I don't want to leave her. Doctor *sahib* please give the gift of one child, just one, we ask no more of life.

The letter is a straightforward plea for treatment and hence the possibility of a partially manufactured grief cannot entirely be ruled out. What stood out from this letter, however, was its explicit reference to remarriage, a theme that was also emerging from the interviews. For example, consider the following excerpt from an interview with a couple (Arvind and Parul), interviewed in a Rajasthan clinic:

> AB: What was the problem?
> Arvind: Nothing happened and then you have to listen to things because of society.
> AB: What you mean by because of society?
> Arvind: You know a woman's position is as good as nothing. Like other women interfere, like you don't have a child, you are barren [*banj*].
> AB: who are these women who talk like this?

Parul: In the family [*Ghar ghrihasti mai*], relatives, near ones even neighbours.
AB: What do they say?
Parul: They say he will leave you, you don't have children, why aren't you having any?

Arvind and Parul were both persisting with the treatment to ward off the social pressures and the blunt insinuations from women within the family that Parul should be abandoned. Arvind's assertion, that 'a woman's position is as good as nothing...', reflects his deep understanding of the difficult circumstances surrounding his wife. Their conjugal bond had faced up ceaselessly to social ostracism for nearly eleven years (they were married in 1986). While many of the studies (cited above) highlight the particular consequences of infertility for women, the two extracts above expose other more complex dimensions of infertility, its stigma and its gendered associations. Biological causality notwithstanding, does infertility have social consequences for women alone? The question remains unanswered: What is the gender of infertility?

The lived experience of infertility for most couples interviewed for this research has been both stigmatising and socially damaging. On the other end of this spectrum of social isolation stood the experience of well meaning but thoughtless social concern, sympathy and pity.

Drawing on the data I therefore argue that: *The gendered experience of infertility is an oppressive contradiction, in which social indifference and social concern, stigma and pity, social isolation and social interference converge to create a condition which is expressly undesirable and therefore in need of cultural management.*

The centrality of stigma to the experience of infertility is a consistent theme in the lives of all the interviewees. The narratives that follow give an insight into how infertility cuts across social markers both as an infliction and as a lived experience.

How Infertility Affects Women

Stigma, at one level, has a unique ability to remain subtle and even masquerade as pressure (and therefore escape detection for a considerable period of time) by individuals who experience well - meaning but often thoughtless concern at home. A couple - Ravi and Geeta - from Lucknow in Uttar Pradesh in north India, interviewed in a clinic in Rajasthan, summed up this complex aspect of stigma:

> Ravi: ...of late as things are her emotions came out and now what is the basic need of hers is [pause] well I'll tell you that society puts it across [pause] anyone who comes asks how many do you have? So probably a lady gets pinched very badly.
> AB: So is it because of a collective pressure or a personal desire that you feel the need to have a child of your own?
> Geeta: I don't care about what people say, let them talk, a lot of people talk. He goes out on tours [trips] then I am lonely [pause] what should I do?
> Ravi: I would put it across as it might be the loneliness, something of her own is not there like, well she says you are not there in my absence probably her way of putting it 'I don't have anything of my own'. I feel after my four years [of marriage] my relatives ask 'what's up?', 'what's the matter?'. They might not ask her but they might ask my mother 'what's the problem', like what is the problem and what are you doing. So first question is put across through her...the collective pressure in the family is put across to her in terms of 'what's the matter?' Then speaking about her own thing that 'I want a child', everybody desires a child, that's probably the second factor. But it's the first factor in the initial stages that plays the part...probably that society puts it across very thoroughly and then after a point you forget the society and your own feelings come across...
> Geeta: Now it feels, quickly I should have a child. I just want one that's all, we don't even want two, just one...nobody says anything, like my husband's relations and other relatives-in-law [*sasural walé*] they will not say anything to their son, they will only blame the daughter-in-law, 'why aren't you conceiving?', 'what's the matter?'.

The distinction between personal need and social expectation appears confused in this extract. The concerns expressed by Geeta become significant in the light of the comment that her in-laws would only 'blame' her, the daughter-in-law, and not their son. Stigma and the shame attached to it makes the desire for 'something of my own' not only part of the solution to the problem but also a part of her survival strategy in

the family. The experience of Maya, a [*Maharashtrian*] Hindu woman interviewed in Bombay clinic, revealed another dimension. Maya and her husband are professional architects and on the day of the interview she was visiting the clinic alone as her husband and she take turns to look after their firm. Maya's social experience of infertility was clearly one of social exclusion:

> Maya: ...When you are educated you think of life on a larger scale, these are all petty matters, the social attitude, they don't socialise with you because of this matter [infertility], they don't call you for functions, that makes no difference, that's petty.
> AB: Have you ever experienced such...
> Maya: Yah! Yah! I have experienced [it]. We have Hindu religion. We have some ceremonies and all to be done, so what happens is that there is a particular ceremony on the seventh month of pregnancy [and] there is a function arranged, to that [function] all women are invited. Certain families they don't invite women who don't have children, so that's when they miss you from their list of guests... so okay [it] doesn't matter anymore because it doesn't [pause] it's a petty thing because they are petty minded, it's a very petty thing, ...it doesn't hurt because we've got over it, it doesn't matter. Initially it hurt, it doesn't matter, it shows how petty they are, they are not growing up [*sic*]. They are not looking at the world on the larger scale...

Maya consistently claims that it does not matter what people think or do, and yet her assertions barely veil her sadness and anger at the social attitudes she has experienced. The stigma and exclusion is in line with the low status accorded to barren women in Indian society. To cite Tulsi Patel again:

> [a barren woman is] ...considered an ill omen both for the household and the larger society. It is inauspicious to run into her early in the morning or on auspicious occasions, such as rituals of childbirth, wedding and marriage, or while setting out of the house to the fields for sowing, or another village or city (Patel, 1994, 78).

Unisa's (1999) quantitative study indicates that infertile women try and avoid ceremonies. Out of 315 women questioned, 164 [52.1 per cent] refused to attend any ceremonies. Bhati et al's (1999) research also supports this.

In Maya's case, her social and occupational status as an architect is rendered less significant than her lower stigmatised barren status. This aspect became even more pronounced when a doctor, Ramkumar, from the North Indian state of Uttar Pradesh was interviewed at another Bombay fertility clinic. While his wife - a doctor herself - was still resting after an embryo transfer he spoke of 'their' experience of infertility:

> Ramkumar: It is a *majboori* [compulsion (to seek treatment)] - what can you do! I am a doctor, my wife is a doctor. We don't have any problem but the society always interferes in your life. The need to ask 'you don't have children, why?' is always there. Even the patients said 'O! the *doctrni* [lady doctor] is barren!' So you do feel. The patients who come say, 'this doctor is barren, what treatment can she possibly offer us I don't want to be delivered by her'...I [as a result] don't stay for more than two years in a place. I ask for a transfer, before someone says anything it is better to go to a new place, so that nobody should say that the doctor doesn't have any children. In the past whenever my wife went for deliveries she was told that 'don't let this woman touch you she is a *banjh*' [barren woman]. She feels it [*sic*]. So we had to get a transfer because people found out that this *doctrni* is unable to produce children, that she is barren!

The severity of stigma attached to infertility and its particular effects on women is bluntly clear from this passage. Whether it is the family, as in the case of Geeta and Ravi, or relations and friends like those of Maya, or simply the 'society at large' that Rajkumar describes above, the symbolic violence that women have to face appears to be both socially and emotionally crippling.

How Infertility Affects Men

Men - contrary to the popular belief – are, however, no less affected by the stigma of infertility. Ajay and Shanti, a couple from a small town in Rajasthan had this to say:

> Ajay: People in the family talk a lot, on our side people talk all the time...

Shanti: They ask what happened about your treatment, you've shown yourself in such a big hospital, what happened, what answer should we give them?
Ajay: There are thousands of things these people say...
AB: Who are these people? Relatives or...
Ajay: Relatives, brothers and friends. You see when a person is lacking something in his life or a person who has a shortcoming in his life, everybody talks things about such a person...*a condition such as mine puts a question mark on you, in every way*. People start saying he's like this, he's like that, if a person is lacking in any way, like in his life, or family a thousand and one shortcomings and troubles are associated with him...
Shanti: They say very derogatory things.
Ajay: The main problem is the social pressure. You see in the society I have my brothers etc, now *I stand apart from everyone, cut off from the social mainstream*. In the family if there is a marriage or anything, you see if you have a child it has so much display value. A person who is behind a person who is off the track, there is a family and the person who is a little different from the rest he has to listen to a lot of things. Now-a-days the way the world is people don't think about your well-being but they are the first ones to contribute to your misery [emphasis added].

Throughout the interview Ajay poured out his pent up frustrations on being infertile. The cause of infertility in their case was (genital) tuberculosis that had affected Shanti's fallopian tubes. To describe his wife's infertility in terms of 'a condition such as mine puts a question mark on you' tells us something important about how Ajay perceives his wife's condition as his. The contagion of stigma appears to have spread and inflicted the 'married body' rather than (wife/woman) Shanti alone. His wife's inability to conceive also implicates his manhood, a topic on which he is silent. Given the popular understanding of the gender-specific nature of infertility, Shanti should have been abandoned by now in favour of a fertile bride since they have remained childless in their fourteen year marriage. Located in a patriarchal joint family in a small Rajasthan town, Ajay's sentiment and his wife's courage in dealing with the highly antagonistic and hostile domestic climate suggests more complexity to gender oppression and equally to resistance to patriarchal norms, particularly since this is not an isolated case. A Punjabi couple from the city of Faridabad in Haryana - Jeet and

Sonia - were more forthcoming in sharing their fears and mutual support, once again making it difficult to view infertility as exclusively a woman's problem where there is no support from the man:

> Sonia: ...people do talk like you should have had, you should have [a baby]...
> Jeet: They speak in a taunting way.
> AB: How are you coping with this pressure?
> Sonia: Sometimes we take it as a joke and laugh it off, sometimes we keep quiet and say nothing, sometimes we say the treatment is on, sometimes we simply say it is in God's hands, we have to deal with it somehow.
> Jeet: People keep on talking and we have to deal with it but at the level of immediate family we are facing no such problem...we have no problem adopting but publicly it is difficult. People would say, you have adopted because you couldn't manage to produce one yourself, you both must be incapable or lacking in some way...
> Sonia: It is also emotional...
> Jeet: You are impotent, they can say anything. To escape all this it is better to have a child of your own.
> AB: Are you tense about the treatment?
> Jeet: Yes, a little bit.
> Sonia: No! not a little bit, its quite a bit! I feel because of me he is suffering. He never says anything to me and he never ever said anything to me like you don't have a child or [pause] I feel bad, because it is my weakness, all his reports are okay. I feel because of me he is suffering and that he is worried.
> Jeet: Psychologically, she is under pressure, she feels that because of her we don't have a child. It becomes a one-sided thing with her.

The social pressure and constant need to explain the reasons for not having a child is clearly the reality that Jeet and Sonia are living. For Jeet, the fear of being labeled impotent adds to his anxiety and hence his need for a child that would establish his masculinity and his wife's fecundity. Sonia's guilt is adding to her emotional crisis though Jeet's continual support in viewing the situation as theirs, rather than as a 'one sided-thing', as he puts it, problematises the issue of gender-specificity of blame for infertility in married relations in India. Veena Das in her study of Punjabi kinship notes that:

> ..sexual virility as a value of the backstage is highly prized among Punjabis. So much so, that even a statement to the effect that a particular man seems to be somewhat weak, can be used to make insinuations that he is sexually inadequate. In cases of childlessness, these insinuations are not rare, for while the childless woman may be accused of sterility by her immediate conjugal family, her own natal family or other members of the *biradari* may blame her husband, by saying that he was always a weakling (Das, 1976a, 8).

This is also in line with the ancient legal code of *Narada* as described in chapter 6. The fear of being considered impotent is central to the anxiety that some men experience in the face of an infertile marriage. The pressure and need men feel to acquire a new wife/field and prove their adequacy is partly in line with this anxiety. However, there are interesting exceptions to this gender stereotype. Some men openly opposed the idea of second marriage through the course of these interviews, while others like Arvind, above, quietly supported their wives while ignoring such social pressure. The most interesting case was of a farmer - Harjeet - from Punjab, who had sold part of his agricultural land to fund IVF cycles:

> Harjeet: ...I thought a lot about this [treatment] you see, my wife, she has a different 'plan' she says our younger sister-in-law is picking fights, abuses her and generally troubles her, on this issue [infertility], she [i.e. the sister-in-law] says take medicine. Sometimes they [sisters-in-law - three married brothers including Harjeet live together with their mother] say get married again but what's the point when there are no sperm in my semen.
> AB: Did you tell your sister-in-law that...
> Harjeet: Yes! I tell her but she doesn't listen. I have said no to a second marriage. I have told them [sisters-in-law] in so many words that if it has to happen [i.e. a baby] it will happen with my wife or nothing at all.
> AB: Do you feel your wife is going ahead with the treatment because of the pressure at home or she is herself very keen on a child?
> Harjeet: She is doing it because of the sister-in-law is giving her a hard time at home.
> AB: Have you ever considered adoption?
> Harjeet: I am prepared.
> AB: Your family members are not supportive of the idea?
> Harjeet: No! even the family members agree. My mother, my sisters, my brothers-in-law they all say try and convince your wife to consider adoption, they say why spend 2 lakh rupees, the adopted child will also be yours. But my wife doesn't agree. Then I have to listen to her.

The narrative above assumes greater significance in the light of Patel's (1994) following assertion on the position of an infertile woman:

> In quarrels and squabbles she is insulted for her failure in fertility performance. The dart of barrenness is thrown at her to whittle down her strength and to latently glorify fertility. She is under constant pressure from household members, relatives and neighbours to produce children (Patel, 1994, 78).

Little wonder Harjeet's wife is putting up such stiff resistance to the 'dart of barrenness' thrown at her by her younger sister-in-law even in the face of overt family support to not seek treatment and to accept her own infertility (she is unable to ovulate) by adopting. Harjeet's support expressed in terms of - 'then I have to listen to her' - and that of his mother, sisters and brothers-in-law brings out the complex and paradoxical nature of stigma. Living in a joint household, therefore, and in an atmosphere of 'fertility competition' with an abusive and younger sister-in-law makes infertility both unbearable and unliveable for Harjeet's wife. It is also significant that Harjeet owns up to his infertility, rather than follow the more conventional route of making the 'barren field' the cause of infertility. As is clear from chapter 6, whilst there is a cultural conception of a barren field in the Hindu worldview, there is no corresponding concept of a barren seed. A man can at best be viewed as incapable of sowing the seed - the potency of the seed is rarely in doubt.

A migrant – Hariram - from a village in Uttar Pradesh, North India, seeking treatment together with his wife in Bombay had this to say:

> Fifteen years ago we faced a lot of problems. People used to say get married again, my mother, she died, she too use to say 'have a child'...so one or the other problem one has to face when the family is involved...but one has to understand whatever god wills happens...

Hariram had been married for twenty years and had not resorted to remarrying as a solution to his wife's 'barrenness'. This is significant, given that Hariram and Harjeet

both have rural backgrounds where abandoning barren wives is not an infrequent practice, as Jeffery et al. (1989) and Patel's (1994) studies amply demonstrate.

The narratives above highlight the difficulties in reducing infertility to a simple opposition between a dispensable/substitutable infertile woman and socially undamaged (in)fertile man. While women continue to remain substitutable on account of their infertility in India, the data above provides some evidence to the contrary. Jeffery et al (1989) and Patel (1994) acknowledge that childless men suffer 'humiliation' but their position is not as 'stigmatised' as that of barren women (Patel: 1994, 79). Equally, there are important exceptions to situations where divorce or the fear of abandonment does not follow a woman on being found to be barren (Jeffery et al: 1989, 88).

However, what the data above suggests is something slightly different. There is a clear sense of sharing the stigma, though it must be acknowledged that the experience of its intensity is bound up with the gender of the respondents above. While the attitude of men like Rajkumar, Ajay and Jeet towards their wives's infertility makes it difficult to effect a distinction where stigma is located in and even experienced more by the female body than male, given the institutionalised gender asymmetry permeating the Indian society (chapter 6) the consequences for women in general are bound to be more severe. Even though the research encountered a man like Ajay who clearly sees his wife's condition as his and like Rajkumar who goes to the extent of opting for transfers so as to shield himself and his wife from the stigma and ostracism or even a man like Jeet who looks at his wife's condition once again as inherently 'theirs' while reacting to his wife's guilt pangs as a 'one-sided thing for her,' the fact remains that men are socially enjoined to abandon barren wives thus perpetuating the inferior position of women. While there is similar evidence in other responses of interviewees in this research that makes it difficult

to deal with the question: what is the gender of infertility it equally points to a more entrenched gender inequity built into the social structure where a man can choose to walk out of a 'barren marriage' with his dignity intact, an option unavailable to a great majority of women.[1]

Conclusion

The stigma of infertility can implicate the couple. Even though the overriding tendency in India is to blame the woman for failed conception the stigma of infertility penetrates to a point where the social identity of wives is rendered barren *and* that of husbands sterile. In the present, as in the past, this presents men with an opportunity to abandon a barren wife and de-stigmatise themselves by opting out of a childless marriage. In the case of an infertile man this amounts to a public accommodation of masculine pride. A public assertion of virility and a public denial of infertility is made easier by an entrenched patriarchal normative order, a process where male infertility is grafted on to the female body, thus rendering it socially barren.

The evidence presented in this chapter complicates this reality. It points to a gender equation where the conjugal bond is not browbeaten by the fear of censure or patriarchal intolerance to 'barren' marriages. This subversion of a commonly understood 'rule of patrilineal marriage' (thou shall abandon a barren wife) parallels evidence from Egypt, where infertile couples are also able to resist, reject and undermine patriarchal interference. Marcia Inhorn (1996a) in her study of infertility and patriarchy in Egypt argues:

> The success of so many infertile marriages bespeaks the strengthening of conjugal connectivity in Egypt at the expense of patriarchy, which is being undermined. Although patriarchal religious, legal, and cultural norms allow men to replace their infertile wives, many men refuse this option out of feelings of love, loyalty and commitment (Inhorn: 1996a, 149-50).

Married couples who either resist a pro-natalist normative structure or turn to medically assisted conception appear to remain unwavering in their commitment to each other.[2] They are - as discernable from the preceding pages - able to face up to both well-meaning but thoughtless concern and callous social attitudes. Not surprisingly, therefore, *delegitimation* of their social identities becomes an almost predictable outcome of nonconformity to the 'rule of patrilineal marriage'. As a consequence, these marriages endure the worst kind of social exclusion and humiliation. However, rather than be subservient pawns in the hands of a delegitimating society these couples - as we shall see in the next chapter - actively persist in seeking treatment within the confines of their infertile union by forging tactical alliances both within their marriage and with preferred members of the wider family. This is a crucial part of a wider process of treatment seeking that has remained a thorny sub-text for the greater part of their infertile lives.

Notes

[1] There is some anecdotal evidence that suggests that women are resorting to legal action as a means of opting out of infertile marriages but such cases continue to remain notable exceptions.

[2] As is clear from chapter 2, out of an average married duration of 10 years the interviewees in this research had spent on average 7 years in treatment. Though the sample is not large enough to make generalisations [N 43] it nevertheless points towards a strong conjugal bond.

Part IV
Introduction

The cultural domain of ideas that the treatment seekers and treatment providers simultaneously inhabit intimately informs an engagement with the technologies of procreation. In making sense of infertility treatment, clinicians and their patients routinely situate the rigours of day to day encounters with assisted conception within these domains of ideas that formulate and articulate their experiences.

The final part of this thesis addresses the paradox lying at the heart of assisted conception by situating the process of 'making sense' of treatment seeking, and its provision within the same conceptual cultural frame that produces social suffering and stigma in the first place. Perhaps this is indicative of a wider cultural facility to enable and disable, to shackle and to set free the human agency. The chapters that follow reveal that, whilst assisted conception challenges culturally given and entrenched normative ideas about relatedness and connectedness, they are tacitly understood and reconciled within the conjugal unit and the wider family. In doing this, the treatment seekers actively persist in seeking treatment and make sense of repeated disappointments in the wider context of social hostility towards their infertility and the sense of urgency such a context perpetuates. However, while treatment seekers sometimes hold the clinicians responsible for eluding conception, they persist in seeking the possibility of clinical conception. Ironically, this uncertainty and tentativeness reroutes them and the clinicians back to the same meaning-giving cultural domain of religious and quasi-religious ideas that *delegitimises* infertility.

Chapter 8:
Changing Conceptions?
The Invisible/Visible Dimensions of Assisted Conception

On the 11th of June 1997 India woke up to a startling piece of news. Nirmala, a 30 year old woman from Punjab in north-west of India, had decided to rent out her womb for 50,000 rupees to an infertile couple. The media frenzy was unprecedented. Overnight Nirmala became a household name, a woman who was renting out her womb so that she could pay her paralyzed husband's medical bills. What shocked the people was not her decision to rent out her womb, but the terms of agreement with the couple - a retired air force officer and his wife for whom she worked. Nirmala was to have sexual intercourse with the husband, conceive a child, and after it was born, hand over legal rights to the couple. The fear of getting prosecution under the Suppression of Immoral Traffic Act forced Nirmla to turn to the legal system to legitimise and recognise her right to rent out her womb[1]. The Chandigarh sub-judge issued notices to the government of India and the union territory administration to decide if the renting of Nirmala's womb was legal and constitutional. Her lawyer in turn openly declared that because she was a Hindu, he would seek sanction from the scriptures for her stance, and call for testimonies of the religious leaders (like the four *Sankaracharyas* and the *Arya Samaj*) on whether a woman can become a surrogate mother. The case is still in court, but a flexible reinvention of the *niyoga* model as a result of this stance has been set in motion.[2]

The outrage surrounding Nirmla's willingness to have sexual intercourse for money, with the intent to procreate for an infertile couple, is in the main a reaction to an arrangement perceived to compromise cherished ideals of purity and sacredness. The surrogacy arrangement renders public the inclusion of a third party in the process of procreation, and commercialises the process of conception that cannot simply be assimilated within the rubric of 'Hindu marriage'. In addition, the episode challenges the acceptable limits to improvisations in resolving infertility within the parameters of a (Hindu) community. Most importantly, Nirmla's ability to use an instrument of the State - the legal system - to assert her 'cultural rights' as a Hindu by drawing on a shared cultural memory (*niyoga*) to challenge her potential criminalisation under the law, exposes yet another instance of 'creative tensions' underlying the relations between individuals, communities and the State in contemporary India (Das: 1999).[3]

The past that Nirmala's defence invokes by alluding to the practice of *niyoga* provides extremely fractured evidence even at the realm of myth. Surrogacy in the Hindu worldview was never a preferred solution for female infertility but rather a cultural accommodation of an absence of the male seed (chapter 6). How common it was as a historical practice is unclear, but there is growing anecdotal evidence of this, and also hearsay evidence of its practice to this day as a means of bypassing infertility within the private realm of the family[4]. In reporting the common prevalence of surrogacy in India - in the wake of Nirmala episode - some media accounts successfully identified the bone of contention at the heart of this controversy. An excerpt from *The Sunday Times of India* (1997) is instructive:

> Artificial insemination is 200 years old. Surrogacy is as old as the Mahabharata. And infertility specialists in Mumbai reveal that they have

> handled several cases of surrogacy, with legal contracts involved. So what's all the fuss about Nirmala? It's just that she's the first to have made public her desire to rent out her womb for 50,000.

The barrage of criticism that Nirmala had to contend with was not merely located in her willingness to have sexual intercourse in order to conceive for the couple, nor even in her acceptance of money for such a service, but more crucially on account of her daring *public* pronouncement about such an arrangement, thus rendering visible that which should have (ideally) remained within in the private domain.

In what follows, an attempt is made to show how individuals deal with infertility and its medical management by focusing on the workings of private/invisible and public/visible demarcations - often put in place with a tacit compliance of the family and the wider community. In doing this, the chapter will argue that the separation between the private and the public or the invisible and the visible is not spatially removed so as to constitute opposing categories but rather the private/invisible realms are maintained by the interested parties in order to construct a credible public and visible persona.

Practical Conception: Making the Visible Invisible

In India infertility - like fertility – is socially visible and hence an object of social control and management[5]. Fertility not only makes conception and reproduction visual entities, but also makes human sexuality visibly public. Absence of offspring in a marriage therefore becomes more visible then their presence. This means any measures to restore the 'visuality' of fertility must traverse socially defined and approved routes well within the bounds of marriage. As in many cultures across the world, the Hindu cosmology views an intimate connection between the body and the progeny. This corporeal connection between married body and its offspring is at once biological and

social (chapter 6). It inextricably binds mother (womb), father (semen) and child (foetus) in an immutable triad. A 'double conceptual bind,' such as this, coalesces the biological and the social in a way that results in a consequent symbiosis between the visible and invisible by allowing for a cogitation of the visible social triad of mother/father/child as underscored by an invisible biological triangle of womb, semen and foetus.

Infertility becomes a stigmatised condition (chapter 7) when these superimposed triads are destabilised by a married partnership. Married couples who turn to assisted conception do so in the hope of restoring the (visible) 'social triad' and to create an illusion of culturally 'unproblematic visuality' of fertility. It is, therefore, not uncommon for individuals to seek medical help to induce conception if cohabitation does not produce a pregnancy within few months of marriage (for details see below). Once the decision to seek treatment is taken, the concern correspondingly comes to focus on how to resonate the management strategy with the normative values so as to cause minimum complications, while justifying the treatment firstly to the self and secondly to the community at large. Both the resort to assisted conception and its presentation are attempts to manage infertility and the stigma attached to it in a manner that causes minimum injury to the 'double conceptual bind', between the social and the biological. This, however, is not always the case.

Writing on sexual violence inflicted on the bodies of women through the course of a 'critical event' (Das: 1999), the partitioning of the Indian sub-continent, Veena Das shows how injury to normative concepts like purity and honour of abducted women could be absorbed within the normal structures of family and marriage as long as these breaches were covered by veils of silence (Das: 1995, 218). In other words, this meant that women

who were sexually violated but whose condition remained publicly invisible could be absorbed within the framework of family by marrying them off 'by some tacit negotiation of the norms of affinity'. Invoking Bourdieu's idea of 'practical kinship' Das asserts:

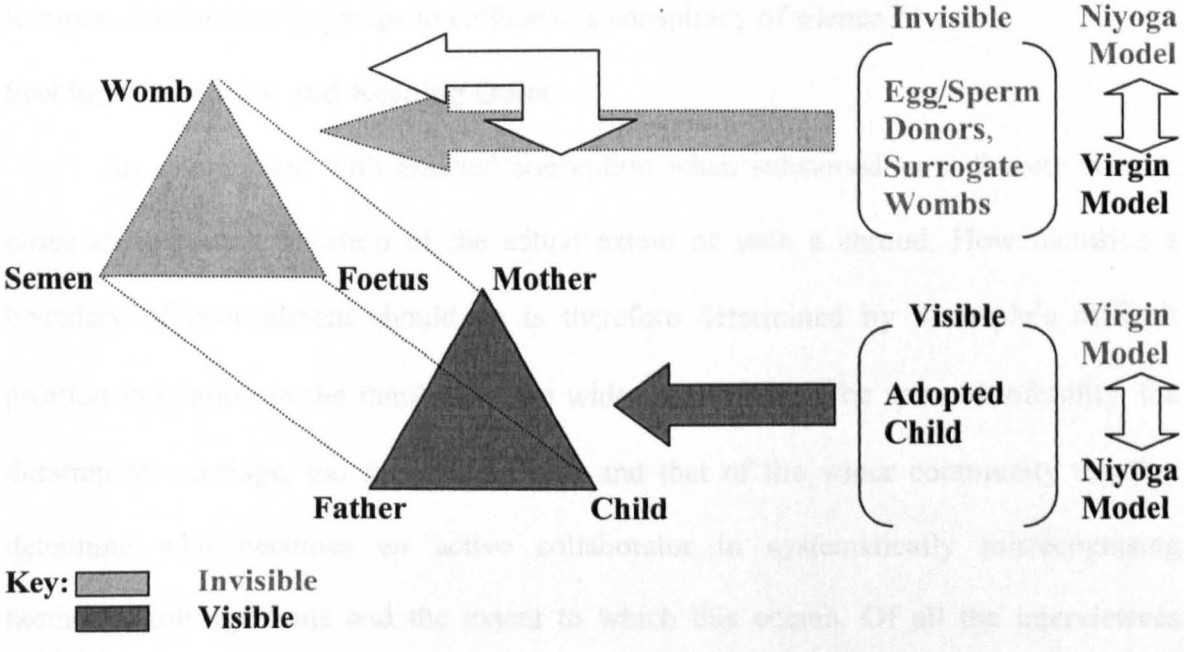
> The complete truth of marriage, as he says, resides in its twofold truth – its official image, which is made up of rules and rituals, and the actual alliance, which results from the internal and external political functions of marriage. He gives several instances of the "self-serving" lies to which a group may give allegiance in order to conceal from itself its failure to find honorable solutions to problem cases (Das: 1995, 219).

While Bourdieu refers to this mode of accommodation as an instance of 'collective bad faith' (Bourdieu: 1990, 178 in Das: 1995) Das reinterprets this ability of a group to conceal what it perceives as a (stigmatizing) normative transgression as *systematic misrecognition* (Das: 1995, 219). The idea of *systematic misrecognition* has important implications for the way clinically assisted conception is both managed and contained within the realm of marriage and the family. Though the complications arising out of infertility do not even come close to the pain and suffering of abducted women, Das's concept nevertheless provides a lens through which to understand the practical and tactical adaptations of individuals and families to the normative damage infertility and assisted conception are perceived to inflict.

Infertility affects married bodies in India. It is in the act of conceiving that a couple is confronted by the possibility of life-long sterility. Faced with the debilitating stigma (chapter 7), infertile couples who approach assisted conception are faced with the possibility of effecting a serious breach in the normative values of Hindu marriage and family on two fronts. Firstly, the fear of an alien input or third party –on account of an inclusion of donated sperm/ ovum/ surrogate womb – causes genuine harm to a conception of an invisible tripartite biological base on which the 'official' image of a

marriage and the family is erected. Secondly, in cases where a couple's own biological material is used to induce a pregnancy, the very act of substituting sexual intercourse - which is confined to the private invisible sphere - with a clinician's expertise – a quintessential third party - becomes a source of anxiety as instrumentation deployed in inducing conception renders the most intimate part of marriage – making babies – visible and public. This paradox in many ways resonates with the problems engendered by the practice of *niyoga* and the norm of monogamous devotion of the wife to her husband (chapter 6). At stake is the purity of a sacrosanct institution – marriage – and a public violation of its boundaries by the inclusion of a third party. On the one hand, it is acceptable to improvise to re-establish the cosmic triad of womb, semen, and foetus and at the same time one has to count and justify the sociocosmic costs of establishing this cultural ideal.

The Double Conceptual Bind & Assisted Conception



It is, therefore, not surprising that many couples in this research sought infertility treatment either in a shroud of complete secrecy or in cahoots with family members. In all such cases the 'taboo on speech' (Das: 1995) was either partial or professed with the express intent of keeping it in place for life. In doing this, couples often lie about having sought treatment and instead attribute the birth of a child to miracle, luck or a divine gift – the result of much penitential prayer and devotion - concepts that are easier to assimilate as explanations in the context of wider family and community. In this respect the social attitude to adoption becomes interesting. From outright rejection to last resort, adoption is the most difficult of solutions for infertile couples and their families. The reason for this is not hard to see, as adoption creates 'the most' problematic visuality of fertility. It is an open and public declaration of failed fertility, not to mention the fears of failed sexuality (as seen in chapter 7). Most significantly, an adopted child breaks the link between the body and the progeny and becomes visible 'third party' in a way that makes it impossible for family groups to collude in a conspiracy of silence.[6]

Seeking Conception and Keeping Quiet

An engagement with assisted conception when subsumed in a discrete silence, poses an important question of the actual extent of such a shroud. How inclusive a boundary of concealment should be is therefore determined by a couple's difficult position in relation to the family and the wider community. The span of infertility, the duration of marriage, the family's attitude and that of the wider community together determine who becomes an active collaborator in systematically misrecognising normative infringements and the extent to which this occurs. Of all the interviewees approximately 40 per cent described themselves as living in nuclear family households,

though a majority of these, on further probing, emerged as part of a larger unit than a notion of nuclear family communicates. In the Indian context, the distinction between nuclear and joint families can sometimes be misleading. A.M Shah (1998), for example, argues that in contemporary India, far from declining, joint families - at least in their household dimension - are on the rise. Joint living within a household has traditionally been associated with rural areas. While the 'jointness' of households is progressively becoming weak amongst the upper class/castes in the urban areas and giving way to nuclear household living (Shah: 1998), this weakening of the joint-family households in the cities is more often reflected in members of two elementary families living together. Thus some of my own respondents who claimed to live in nuclear households were in actual fact living jointly either with elderly dependent parents, an unmarried sibling or both. Nuclear households that came into being on account of migration in the lives of some respondents did not sever contact with the family of origin, as the move only affected joint (household) living and not the social relations and hence interference/control of the extended family. Household and family compositions notwithstanding, the constant presence of family members in a marriage presented varying constraints or opportunities for married couples to manage their treatment strategy either without, or with partial, or in complete connivance with preferred members of the family group. For instance, at an individual level couples either pursued the treatment secretively or sought familial involvement to keep at bay wider social disapproval and interference.

Ram Naik interviewed in a Jaipur clinic had simply this to say:

AB: What is the response from the wider family to the treatment?

> Ram Naik: As far as my case is concerned in my family nobody knows. They only know that I am taking some treatment that's all. But the actual problem whether the problem is with me or with her nobody knows.

In cases like Ram Naik's, couples often cloaked the treatment process in ambiguity. Keeping the family out was a way of managing an accentuating stigma and pressure to conceive. Partial concealment therefore equalled a degree of secrecy. Families, in cases like Ram Naik's, are happy to look away as long as the couple is seen to be taking action to remedy a continuing absence of children. Partial concealment, however, could not be pursued indefinitely as the impatient wait for results invariably led family members to ask after the progress being made. This meant that couples could not sustain an evasive stance and had to resort to other ingenious ways of distancing familial or communal interference. Ajay was one such respondent:

> Ajay: ...people who are doing jobs and living separately have a different atmosphere, there you can do anything [its not like being part of a joint family] like in our case, we hide and come to this clinic, we don't tell anyone that we are going to the doctor, we sneak out.

Reduced to sneaking behind their family's back, the couple was clearly upset by the measures they were forced to take to retain some semblance of privacy and control. Ajay's case, above, was further complicated by the fact that he and his wife lived in a 'joint family' in a small town in Rajasthan, which meant the prying gaze of the family and the community was particularly difficult to avoid.

Middle class business or professional couples interviewed in cities like Bombay, on the other hand, were similarly not keen on sharing the details of their treatment with the wider family, or at most women took their parents into confidence while seeking treatment quietly. Sunila, married to Ramesh, had this to say:

> Sunila: What treatment we are taking only my parents know. My in-laws think that we are taking some minor treatment.

Once again, partial concealment was Sunila and Ramesh's way of keeping the full truth of their efforts to secure a pregnancy localised within the marriage and within the part of the family – Sunila's parents - they perceived as supportive enough to help them keep the treatment invisible. The partial concealment so achieved meant that while Ramesh's parents had some inkling of a rudimentary medical involvement they continued to remain unaware of the procedural complexities.

Forging Alliances: Couples, Families, Clinicians and Tactical Coalitions

Excluding family pressure can be extremely problematic. The pressure to conceive adds significantly to the anxiety that couples and individuals bring to the clinics. Couples had to face significant pressures at home to seek treatment and the familial interference sometimes extended to include an active participation in the treatment process which the couples worked hard to keep to a minimum. Dr. Neeta thus recounts how she has had to deal with the mother-in-law, father-in-law and the sister-in-law of the patients. 'They all come, sometimes the whole family comes' she asserts, which makes the initial and subsequent consultations an ordeal for the couple. On occasions at her clinic some couples were observed accompanied by their family members. It would not be right to construe the family as a mere obstruction or pressure on the process of assisted conception - as family members also accompanied the couples out of concern or to show support. Nevertheless, as Dr. Neeta observes:

> ...fifty percent are always with the mother-in-law or mother or somebody, sometimes in their [couple's] absence the mother-in-law or the father-in-law or their mothers will call 'Dr. Neeta we just want to come and talk to you about this issue and we don't want you to tell our children that we had come here, what is the problem? Maybe they are not telling us the truth, like the

> problem they have'...it is very difficult [in cases when the family accompanies the couple] normally I tell them 'there is no role for all of you, if you sit outside I'll feel very happy because I am going to ask some embarrassing questions from the couple, the couple will feel embarrassed, you will feel embarrassed and because you have come to me I have to do justice to my job, and justice to your coming. If you think you still want to be here it will become very difficult for the couple [and] *maybe the treatment will go wrong somewhere because they will hide some problem which they will not tell me in your presence.* So when I reach some conclusions and select the treatment I will call you here and explain everything', that's the way I deal with difficult situations you know...[emphasis added]

Whether out of concern or malice, the familial interference complicates the situation by adding unwarranted pressure to an emotionally charged situation. Doctor Chandra spoke of the tremendous (social) pressure to conceive, that patients and their family members bring to initial consultations:

> ...you will be surprised that a few days back I had a lady walk in with her daughter-in-law and I am telling you, I mean this will tell you the kind of pressures that there are; a young girl, so she said [referring to the mother–in-law] 'O! you know every month she starts menstruating', I was really taken aback by the crude way it was put. 'What's the problem she is not conceiving?' I said 'how long has she been married?' that's the first question in a history that you would ask and I'll give you a guess, what do you think it was? Just take a guess! Four months! FOUR MONTHS!! Can you imagine the kind of pressure; just imagine the kind of pressure the poor kid was under, her mother-in-law is watching every menstrual cycle! This is pathetic that's the kind of social pressure there is in the country...

In India it is not uncommon for treatment seeking for infertility to commence very early in the marriage (Mulgaonkar: 2000). The severity of pressure from family not surprisingly adds to the urgency with which married couples turn to clinical medicine for help. Thus Dr. Jatin argues that:

> The social pressure to have your own child is much, much higher in India. The social pressure is more within a year of marriage. People start telling the wife or the daughter-in-law 'why are you not conceiving? Why don't you see this doctor? See that doctor! Go to this temple, go here go there' you know it starts within a year of marriage...plus there is a lot of social pressure from friends relatives, everyone [is asking] why are you not conceiving? So they

> [the couple] seek treatment very early. You will be surprised that 19 year old if she doesn't conceive by a year, by 20 she comes for treatment! Even if we say we will go slow, we don't want to do laparoscopy these are operative things we will do them after two years or so [as last resort], nothing doing they walk into the clinic next door. That's the kind of pressure they are under, they want instant results, they want fast treatment.

The pressure to conceive, therefore, pushes some couples either to withhold from the family the truth about the treatment, fearing further interference, or to partially conceal (as seen above) as a way of silencing continuous probing. However, cases such as the ones Dr. Neeta and Dr. Chandra recount above are difficult for the couples to manage. That is, in keeping sensitive information pertaining to assisted conception enveloped within the marriage and fudging the exact nature of medical involvement, the couples need more than each other (or need more help than select – sympathetic - family members can provide). In this respect the involvement of a clinician can become vital to the process of collusion as s/he often stands in a position to mediate between the couples and the interference emanating from their families. Through the course of participant observation at an IVF surgery in a private Delhi Hospital, a number of instances were encountered where the couples enlisted clinicians' help in crafting 'official kinship' (mother/father/child) from more 'practical kinship' truths (donor sperm/egg/foetus) for the consumption of their families and the community. Referring to a patient whom I had briefly met on the morning of this interview, Dr. Neeta said:

> The man this morning, he was really under stress. He cried a lot on the day he came to know that he doesn't have sperms, he really cried a lot and the girl also (referring to the wife) cried a lot and then they again came back to me. Next day they were feeling a little better and they said 'we are ready for the treatment (IVF) with donation', sperm donated conception. I said I am not ready today, you need some more time to talk to each other, go home and then they took two months and after two months they are back and now they are happy, but this man is still going to tell in society that it is "my sperm. Dr. Neeta has taken it out with a small needle and it has been injected in my wife"

and they are going to keep the secret throughout their life. The wider family doesn't know and they have told me if they (family members) phone "please don't say anything about our treatment and if somebody phones from our house (*sic*) just say that I have taken out the sperm with a small needle..."

The couple appears to be partially concealing their treatment at home. On account of not having clear-cut information on the treatment procedure the couple fears that the family members might call the doctor for more information. The clinician is drawn into the lie that the couple is destined to live for the rest of their lives. Dr. Neeta infact frequently became involved with her patient's domestic and personal problems as she considered it an integral part of the wider counselling process (see chapter 10). The following entry in the field notes journal – 9 June 1998 – on a new patient consultation is revealing:

A young couple walks in.
Woman: Dr. Neeta we called yesterday. We have slight problem can you take a look at these reports and tell us what is happening.
Man: We are married for two and half years and I am in construction business.
Dr. Neeta is silently reading the reports the couple brought with them.
Woman: [anxious] Do you think something can be done?
Dr. Neeta: [still looking down at the reports] There is no way you can produce sperms [interrupted]
Woman: [high pitched voice] Why this has happened? Why?
Dr. Neeta: Y chromosome genetic test [interrupted]
Man: Is there any way we can correct this?
Dr. Neeta: Donor insemination...
Woman: Go for sperm donation! We are not prepared for that, what do we tell the family?
Dr. Neeta: Don't tell the family [interrupted]
Woman: That's one mistake we have made! They all know about the fact that he is not producing. I am not satisfied! I want to know everything there is to know [referring to azoospermia].
Dr. Neeta: We have handsome well-educated good-looking boys coming to us for sperm donation and we match the patients and the donor, blood group etc.
Woman: [thoughtfully] We can also tell them [i.e. the family] that now it is possible to inseminate [using her husband's sperm] or some such excuse!
Dr. Neeta: I had a couple come to me who was anxious about the same thing. The man would ask me to contact him only on the cell [to fix appointments, consult on donor profiles etc.] and if I had to call him at home because they lived in a joint family I had to pretend to be his wife's friend, they even gave

me a pseudonym and I [or the assistant] had no choice but to pretend and play along this little game and give the impression that I was his wife's close friend. They went for donor insemination and passed it off as their own.
Woman: [deep in thought] These tests could have been a mistake. Do you think they could have made a mistake?
Man: [embarrassed smile] There can be a mistake once, twice but not after three tests. [now addressing the doctor] How to convince the family about donor sperm as they would feel their son's part is not there. Could we try parallel medicine?
Dr. Neeta: If this can't help [i.e. past medication] how can other things help? Look even if you can give me three or four sperms I could help you, we have such sophisticated technology here [referring to Intra Cytoplasmic Sperm Injection] but in total absence of spermatozoa I can't help you.

After the couple left Dr. Neeta turned to me and said 'did you see how arrogant the wife was'. I asked what made her say that. The doctor felt that the wife was arrogant about the fact that her husband could not produce any sperm, about her in-laws not understanding, 'the girl was angry, she was quite upset'.

The doctor's criticism of the woman's resentment reinforces the view of married relations as one in which a woman carries the burden of her husband's sterility. But the case above points to more complex dimensions of gender politics within a marriage than those which are usually on display. The woman above, though seen as arrogant by the clinician, is more significantly someone asserting her fertility in the face of her husband's 'lack'. Assertions like 'I want to know everything there is to know' appear to have become a weapon she wields to vindicate her normality both to her husband and his family. This is not an isolated case as Dr. Neeta had earlier in the interview referred to a patient whose in-laws (both doctors as she was herself) were blaming her for what was clearly a case of male infertility. The woman in question has since applied for divorce and, as Dr. Neeta put it, 'she says I will not tolerate this nonsense anymore'. Dr. Shanta, another Delhi based IVF practitioner, similarly referred to another interesting case:

This man came to me and broke down! He said my wife treats me like a rat! He was azoospermic. He then came to talk about donor semen and he just

> broke down he was so full up. This happens so many times you cannot imagine. I have so many men who come to me here and I can see that wife is the dominating partner and the man becomes quieter and more submissive.

In all the three cases above there is an evident lack of passivity amongst the women who resist being made accountable for their husband's azoospermia. Though beyond the scope of this project it is essential that this aspect of infertility and its impact on the conjugal bond in relation to the wider family (including in-laws in particular) be further researched. It is, however, clear from the forgoing that women are on occasions able to both resist and oppose the familial practice of holding daughters-in-law accountable for infertile marriages. It also emerges that the need to conceive quickly and reticently is crucial to the survival of a marriage overburdened by familial pressure. In case of the first couple above, for example, the practical arrangements to conceive were becoming too difficult to manage given that the entire family knew that 'he is not producing'. The couple has less of an objection to sperm donation per se than concern with more practical considerations of justifying a sudden visuality of fertility to the family who would oppose any arrangement in which their 'son's part is not there'. The involvement of the family can become inevitable when couples like the one above either do not plan too much in advance and cover their tracks or are forced into seeking medical help by family members themselves. In either case, the process is confined to a silent enclosure of selected family members and the clinician. An interesting exemplification of this is the case of a mother and son - Sita Devi and Rajan - who were interviewed in a Rajasthan clinic after Rajan's wife gave birth to a boy after a successful IVF by donor sperm:

> Sita Devi: ...our daughter is a doctor, she had explained everything to us. Nobody in our family knows, it is either me, my husband, him [pointing to Rajan] or his wife. The fifth person to know is our daughter, even her husband doesn't know, she hasn't told him. We are only five people who

> know what the reality is...we never opened it to anyone. The moment we saw that both were of the right age, so we thought if they don't have children now then their chances would get bleak. And we tried to keep it under wraps, and we also [she and her husband] came to know because he was financially weak otherwise even parents don't come to know of it...besides not everyone can understand or take to or accept this treatment - because we had the lady doctor at home we could understand it better, the public is not capable of understanding everything, in our case we had the lady doctor in the family. If she hadn't explained us the whole thing and if it wasn't kept a secret, no body knows...

Sita Devi's overwhelming sense of joy at the birth of her grandson is partly due to an acute sense of relief that 'nobody knows'. Repeatedly in the interview she alluded to the importance of keeping the whole treatment a secret. The issue of infertility, donor insemination and clinical management, as she hints, are difficult for people to understand.

A close-knit group from within the family, therefore, colludes to keep invisible the breakdown of the double conceptual socio-biological bind. Secrecy is almost uniformly prized amongst couples and their collaborating family members. Dr. Shanta described the secretive world of such couples who bring a new life into the world under wraps only to misrecognise the circumstances leading up to its birth for the rest of their life:

> Fifty percent of the patients don't tell after the baby is born that it was an IVF baby at any social gathering, in front of another lady, never. Even when they talk to someone in private they make sure they tell that person not to tell anybody that this is an IVF baby. They think there is stigma attached to the baby.

A sense of anxiety in owning up to the IVF status of their newborn compounds the 'taboo on speech' that couples, and in some cases their family members, come to observe. This is even true of those whose own gametes are used in bypassing tubal damage to help them conceive. The very act of including an external agent in the process of conception leaves the entire process of making a baby compromised. Dr. Shanta gave another example of a scientist who had invited her to the naming ceremony of his 'IVF daughter'

with an added request not to mention anything pertaining to the procedure let alone the gamete donated status of the child. She went along and played the part of just another guest as the happy parents had asked of her.

Not all tactical alliances within the familial unit or with the clinicians have such happy endings. In contrast to the couples demanding the doctor's help in warding off families meddling about, inquiring for the truth behind their treatment, there was one specific instance encountered in this research where the parents themselves approached the clinician to secretively scheme with them to impregnate an unsuspecting daughter-in-law. Dr. Neeta had been on the receiving end of such propositions from parents of an azoospermic man. Here's an excerpt from the field notes journal – 4 June 1998 – that sheds some light on Dr. Neeta's continuing encounters with family intrigues:

> On the way back from the clinic Dr. Neeta gave me a lift in her car. She soon began to discuss the parents of a young couple who were hounding her to carry out donor insemination without the knowledge of the daughter-in-law. The man in question had two sons – twins – and wanted the elder son, who was azoospermic, to start a family. To this end he either wanted an anonymous sperm donor, a sample from whom could be used without the knowledge of his daughter-in-law, or alternatively the younger twin brother could donate as the man held that genetically they were from the same 'stock'. Faced with persistent resistance from Dr. Neeta the man continued to pressurise her to let the younger brother be the donor for the other twin without either of the wives – his and his brother's – ever finding out. The silver lining to this ingenious plan, according to the man, was that life would go on as normal since to the world at large and to his daughters-in-law the sperm/child would belong to the eldest son. 'The man is after my life' said Dr. Neeta, 'even when I was in England he used to call me often. He's a very rich man, one of the richest men in Delhi living in a posh south-Delhi colony. He is after my life to go out to dinner with him and discuss this further over a meal. I don't know how to put this across to him that I don't operate this way, that this is so unethical!'

The case above opens a space where it is possible to see how conspiratorial the 'official' truths of marriage and kin relations can be. Though still in hot pursuit of a clinician who

would heed his request it is only a matter of time before a man of his means would successfully lure an unscrupulous practitioner to execute his ingenious plan. The preference for 'keeping it in the family', is in fact quite commonplace amongst some men and their family members, who according to some clinicians come to the clinics either on the pretext of consulting with the doctor on the appointment of an appropriate donor, or with straightforward request to bring a family donor. Dr. Shanta, when asked to comment on what people look for in a 'good donor' revealed that:

> People bring family, the father of the [infertile] man, brother of the man. I don't know how it affects their personal life!

Dr. Kamraj also explained how in her years of practising in Madras, she has had to contend with demands from some individuals wishing to keep the source of sperm and egg donations within the family:

> ...sometimes a man comes and says I'll get my brother's sperm, my father's sperm. I said no way you do that I will not treat over here. I tell the lady a man is unpredictable, Y chromosome is very bad [and] then they will make advances on you and claim your [sexual] rights, are you mentally prepared for that? So I tell them I will not do it here, you can go wherever. Unidentified egg and sperm donor is best and I say the best comes to you, I will match the [blood] group, I'll match even caste community, I try and match everything and therefore I don't agree for all this but I have sister donors, that I allow, sperms, no! Only unidentified, but eggs from own sister is fine...

Dr. Kamraj's objection can be understood as a way of keeping the identity of the donor a secret (so called standard clinical practice), although her willingness to accept sisters in the know of all the parties involved raises the question of how the issue of gender and sexuality shape the process of donor selection. Dr. Kamraj's contention is in fact a fine illustration of what Erica Haimes (1993) has called 'issues of gender in gamete donation'. In the context of the Warnock Report established by the British government, she convincingly argues that woman to woman donation of egg was seen as completely

asexual when compared to man to women donation of semen. She argues that a female third party is not seen as invasive, or as significant a threat to the socio-political stability of the family as a semen donor, i.e. the boundaries of a family are less threatened by egg donation then is the case with donated semen (Haimes: 1993, 92). The 'dubious sexual connotations' and a sense of 'inappropriate sexuality' attached to semen donation that Haimes identifies in the report, also reflects Dr. Kamraj's fear of potential sexual misconduct threatening (patriarchal) marriage and family.

The strong personal objection to donated sperm from within the wider family that Dr. Kamraj articulates above is echoed differently by Dr. Srinivas to whom the very idea of using any gametes other than from the couple involved is deeply repugnant:

> ...if it's the husband its okay, people don't accept they know its not their own child. If she is a very pious lady then she will not accept another man's sperm at all! A couple may prefer to adopt a child than go for this option. I would consider it out of culture, what is culture basically everything if you can compensate by something else than there is no point in leading life like that, you don't know about the father maybe he is an outcaste fellow, probably he was a thug or a rowdy, how do you know that the sperm was not from a man from behind the bars, if he is a murderer that thing can come in...

While Dr. Srinivas's objections and fears attached to donor sperm may appear far-fetched it nevertheless reveals something important about his personal mind block against the practice. It strongly articulates 'the yuck factor' and a view that considers the social categories of the source of biological material as significant (Haimes and Williams: 1998, 141; Daniels and Haimes: 1998).

The sourcing of 'life-engendering material' is contentious. For instance, the assertions made by Drs. Shanta, Kamraj and Srinivas appear to push the debate towards the same conceptual complexities that the heuristic *niyoga* and virgin models sought to problematise in chapter 6. It is clear from the above that there is a sub-group of treatment

seekers who only accept the idea of donated gamete conception from within the family. Dr. Kamraj's willingness to accept egg donation between sisters also points to a prevalent trend in India where sisters do help each other by either donating eggs or, as seen earlier, by surrogating their womb as a receptacle for their brother-in-law's sperm. In north India, in fact, a man's relationship with his sister-in-law is often jokingly alluded to as being semi-conjugal as reflected in the common Hindi adage that can be crudely translated to mean 'wife's younger sister is half wife' (*sali adhi ghar wali*). This structurally embedded and socially tolerated joking relationship between a man and his wife's younger sister mirrors and redeploys a similar bond between a woman and her younger brother-in-law (as seen in chapter 6). Whether this relationship of privileged over-familiarity is a vestige of an ancient tradition where younger (unmarried) sisters were brought up to be potential substitutes for their older sisters in the unlikely event of them being returned to the natal families on account of their infertility is not clear. Though several fieldwork informants alluded to such a practice in the ancient past, this could not be substantiated, unlike the *Vedic* references to *devar* as second husband (chapter 6). This makes the issue of the man desiring to procure his twin son's semen to fertilise the older of his two daughters-in-law interesting. As discussed in chapter 6, the practice of *niyoga* or levirate was a way of bypassing an absence of male seed. In the context of a *devar* this either meant a privileged sexual access or an obligation to marry his widowed sister-in-law. This raises a vital question: in using a sibling's semen, do the family members of an infertile man acknowledge his genetic death? More crucially, is the need to source semen from a brother or father an expression of intimate links that people perceive between semen and the common blood that flows through and maintains a patrilineal descent

group? Dr. Kamraj's opposition to intra-familial sperm donation is at a manifest level rooted in biological determinism of a kind that casts aspersions on the character of the 'Y chromosome' but it also latently hints at similar cultural concerns that were linked to the subtle shift from *niyoga* to more brahmanical concerns with virginal purity (virgin model). Not surprisingly, therefore, Dr. Srinivas eulogises a 'pious lady' who would never accept another man's sperm and presumably remain monogamously devoted to her god husband (*pati permeshwara*). He considers the inclusion of a third party in a marriage as 'out of culture' and sees little point in leading a life in which the purity of a marriage is compromised. These are some of the complex issues that need to be further researched. For the moment we can only see fragmented connections between cultural concerns, past and present, inflamed by infertility and its social management.

Couples/men who pursue clinical conception in relative anonymity and in insulation from their families approach the issue of alien input in the process of conception differently. In such cases the concern is centred more on the outcome of pregnancy than its actual source. To cite Dr. Shanta again:

> Our society is still not so liberated that they accept adoption. They [couples] accept taking donor oocyte, they accept artificial insemination by donor semen anything but they want to deliver the baby so the whole world can see that she has delivered a baby. So many men have got very near normal sperm but out of sheer frustration they say 'oh use any sperm you want I want a baby', they just don't care! They just want to prove their fertility that is all...a woman at some stage in the family wants to prove it...the man just wants to prove to the world that his wife has produced a child, that he is capable of fathering a child...

There is some truth in Dr. Shanta's assertion. Barring a handful of couples, a great majority, when asked to share their views on donated gamete conception, felt it was acceptable as long as it was kept quiet. On the issue of the donor itself the unanimous

response of these couples was that they were happy to let the doctor source a suitable donor and that they had no personal preferences. These couples were very much less concerned about the sourcing of eggs and sperms for inducing conception than about the eventual birth of a child[7]. However, to be clear, it is important to point out that an open acceptance of the 'other' in the reproduction of the 'self' is a gradual process in the lives of most couples, as Dr. Sachin's following assertions clarifies:

> ...the basic idea is that somebody is violating your marital relationship, a third party, that feeling itself is not very easy to accept, if I put myself in a patient's place I understand how they would feel. Here the marriage is considered as the ultimate bond and to have a child with donated gametes does upset a lot of couples but then again once they reach the age of 35-36 they know they've no other option besides adoption. In adoption they get a child whose background is not known, here okay at least egg or the sperm, at least one of the gametes is their own, plus the woman has the satisfaction of delivery. Donated gamete is acceptable as long as it remains confidential and the husband and wife are very sure of each other, they understand what they are going in for without any cheating - that is one person is not told and it's done you know things like that should not be done.

The normative injury to the double conceptual bind is first and foremost processed and absorbed by the couple as acceptable. As Dr. Sachin explains, it is a long process coming to terms with such an upheaval in the marriage. Couples who appear not to care what sperm or egg is used to induce a pregnancy in Dr. Shanta's estimate, above, are mainly couples who have spent years in pursuit of conception while trying to escape increasing family pressure for results (see chapter 9). Exhausted, some couples either simply adopt a child because they view a donor as a totally unacceptable founding component of their family, or in other cases they gradually accept the option of a third party input[8]. Having made the transition, however, the need to misrecognise the breach in salvaging the situation becomes crucial, and couples come to cut their losses by seeking satisfaction in

having partial links with the child. Consider the following exchange between Ravi and Geeta:

> AB: Would you prefer donor insemination to adoption?
> Ravi: I'll prefer donor.
> AB: Any specific reasons?
> Ravi: See with donor the child would stay with the mother for nine months. So the affection that she will develop towards that child will be far more than what I feel when we adopt a child. It is my feeling.
> AB: [To the wife] Do you agree?
> Ravi: [Now explaining to Geeta] What I am saying is that, one there is adoption and on one hand there is GIFT. One child comes from your stomach and the other one is adopted. So your affection towards the one which comes out of your body and affection towards the adopted one, would you feel the difference between the two?
> Geeta: A child that is your own is your own.
> Ravi: What I was asking would there be a difference between the two?
> Geeta: No both will be the same there is no difference. If nothing happens we will adopt.
> Ravi: From her side there is no difference.

For Ravi, the connection with the mother's body is crucial to the bonding process and Geeta is more open in stepping out of the confines of the socio-biological fertility triad. In Ravi's approach, the emphasis on the visuality of fertility is central, as the possibility of the child coming from Geeta's stomach (womb) becomes an anchor that keeps them peripherally anchored within the biological triad.

Adopting a Stance: Reluctance Towards Adoption and Overcoming It

Reluctance to adopt, or its grudging acceptance as the last resort is appreciable. Dr. Mankar contends that in India:

> It is the question of male ego they wouldn't mind having a donor insemination done without anyone else apart from the couple knowing because the other option is to adopt a child, which everybody would know.

Protecting the male doubles up as safeguarding the image of a marriage which could – as seen in some cases above – crumble in the face of a woman resisting being made

accountable for her husband's sterility. Adoption in such cases deals a further deathly blow to the entire project of concealment that fuels and propels the misrecognition process. A publicly visible child incorporated into the family without any corporeal connectedness with the family unit makes the child/couple vulnerable to social ridicule and stigma that is perceived to be worse than being called infertile. Rekha and Sudhir had not given any thought to the idea of adoption, as Sudhir had uncritically prejudged the possibility as unacceptable because of the callous social attitude:

> AB: Would you consider Adoption?
> Sudhir: No!
> Rekha: I have considered.
> AB: What is your objection to adoption?
> Sudhir: There is no objection to it as such, immediately on the face of it I have said no. I have not even given a thought to it. Basic instinctive reaction! Maybe over a period of time I will change, I don't know, maybe, I'm not yet! The biggest problem in adoption over here in India, and its going to stay till people don't mature in their thinking, is adopted child is a bastard child! It's the future of the child [interrupted]
> Rekha: How much can they protect themselves [interrupted]
> Sudhir: That is the problem with adoption the stigma attached to the child. Parents can understand because they are of particular age, they are mature enough to think, they have taken their decision for adoption, but what about the kid?
> Rekha: Why should you make a child suffer? Why should we make another human being suffer for us?

Sudhir and Rekha were voicing a widespread fear. The idea of a 'bastard child' is seen to contaminate family formation in the eyes of the community, so that couples fear that by adopting they would, for all practical purposes, condemn the child to live a life full of jibes and ridicule. The transgression is yet again one of visible violation of the 'double conceptual' bind, as the idea of a bastard child suggests a reprehensible union of semen and womb devoid of a social matrix - the institution of marriage. To absorb such a child in the folds of a marriage doubly perpetuates the process of *delegitimation* (chapter 7),

due to the physical proximity of an infertile marriage to a bastard child. It is interesting how the invisibility of a child's origin marks him/her as socially deficient. Children given up for adoption come from a variety of backgrounds ranging from teenage pregnancies, to orphans, or children whose families are too poor to look after them. However a great many of these children are born out of 'wedlock' and are invariably looked upon as a product of illicit sexual union. Bharat's (1993) study of 16 adoption agencies located in five cities/towns of Maharashtra State found that, of a total of 4526 children given up for adoption, 74% were abandoned by their biological mothers since they were born out of pre-marital or extra-marital relationships (Bharat: 1993, 55). This also links with the wider concerns of adoptive parents on the issue of the 'quality' of the invisible 'background' of a child. In the present day context, this anxiety is articulated by questioning the genetic credentials of the adopted child. Such a presentiment is in consonance with apprehensions surrounding the invisible bloodline, clan and caste origins of an adoptee. A couple – Shanker and Sumita – dealing with secondary infertility were amongst a vocal minority of respondents who objected to adoption on the same grounds as they objected to donated gamete assisted conception, namely alien genetic input. Such couples either reluctantly adopted from a close family member 'if all else failed,' or remained childfree for the rest of their lives. Shanker and Sumita had this to say:

> AB: Have you ever considered adoption?
> Shanker: [long pause] I am thinking we will have a child otherwise if it gets too prolonged then we will adopt...sometime back we did toy with the idea of adopting but you see the problem is that the child should also be proper.
> AB: What do you mean by proper?
> Sumita: The parents genes are bound to show up in the child so even if we adopt one how do we know what kind of genes does the child have and what

if our genes don't match and we don't get along at home and what if as a result it brings us bad name so what is the use of such a child?
Shanker: It has happened like this couple of times, there are instances, otherwise there is no problem with adoption if the child is very young.
AB: Your objection to donor insemination is also based on similar concerns?
Shanker: Yes!
AB: What do you mean by genes?
Shanker: Gene *Sutra*! Certain qualities in an individuals.
Sumita: Qualities are always inherited by the child.
AB: What do you mean by qualities?
Sumita: The ability to adjust in the family.
AB: Don't you think qualities are a product of upbringing?
Sumita: Upbringing does make a difference and also the environment around the child [interrupted]
Shanker: Chromosomes [interrupted]
Sumita: The child will learn from his surrounding too.
AB: What were you saying about chromosomes?
Shanker: It's in it [laughs] anyway I was just saying like that. I still believe we will have a child...and if not then we will adopt, there are a lot of children in my family.

The couple above has constructed a folk model of genetic relatedness that according to them lies at the heart of amicable domestic adjustments between parents and children. There is an important sub-text in many of Shanker's assertions. The first of these is to do with how an adopted child from another gene pool may not readily blend in their familial environment. The source of this anxiety, though manifestly attributed to a biological incongruity between the adoptee and the family, is at least as much located in the fear of social disapproval. Consider the following exchange with another couple, Arvind and Parul, on the issue of adoption:

Parul: In the family people say [interrupted]
Arvind: Suppose if something happens then people would say someone else's child they adopted that is why it happened like this, if its your own anything can happen it would not make a difference.
AB: Does it mean if the societal pressure was not there you would have considered adoption?
Arvind: Absolutely!

The very idea of society allowing a child of one's own a degree of freedom that is denied to an adopted child gives an insight into the deep angst infertile couples experience in dealing with the question of adoption. An adopted child's failings and achievements can in such an atmosphere run the risk of being explained away as a feature of its unknown parentage[9]. Dr. Srinivas's views on donor insemination, reported earlier in the chapter, substantiate this tendency to attribute character flaws and even criminal behaviour to the genetic properties in semen transferred anonymously to fertilise wives of sterile men.

The second intriguing sub-text in Shanker's assertion is his passing reference to accepting an adoptee so long as it is 'very young'. An obvious reason for this may lie in a perception that considers it much easier to mould a relatively younger child to merge into the fabric of its new family. There is, however, another far more important consideration that surfaced through an interview with the head of a Bombay based adoption agency:

> A case which happened recently was of this lady who came with the plea that she's tried all the treatments and wanted to adopt a young child...she said she is going to pass it off as her own child, she's a teacher, a working woman and this is her attitude, this is what she told us that 'I'll pass it off as my own'...she was even ready to say to the people, I mean, her relatives and husband's relatives that she is having a surrogate mother, that was acceptable rather than adoption. I couldn't believe it, should be more tough to talk about a surrogate mother but she was ready for that...they [referring to people looking to adopt children] want the youngest child that they can get...we tell them of course zero year we can never give because 0 to 3 month we have to keep the baby in our care because that is the reconsideration period for the (biological) mother to come back and ask for her child but they would like to have three and half to four month old, as young as possible...

The only way an adopted child can be accommodated in a marriage is by misrecognising its origins both within the family and outside. As in the case of donated gametes the 'visual' respectable image of a marriage can only remain untarnished by concealing this truth. In the adoption agency's estimate, most educated middle class professional couples

adopting children were least likely to keep such secrets.[10] On the other hand, individuals who cannot keep the fact of adoption a secret prefer to source the baby from within the wider family as, firstly, it neutralises the stigma of adopting from an unknown source, and secondly, such a move ensures the 'respectable' credentials of the baby in the eyes of anyone privy to the truth. This also becomes a logical extension of keeping family formation close to the 'agnatic blood', an idea echoed in the need to source gametes from within the family. Whether the intra-family adoptions remain socially invisible is an issue that needs to be researched further. That is to say, what kind of alliances are forged within the families in case of such adoptions, and what kind of parameters are drawn beyond which the truth is not permitted to travel?

Conclusion

Marilyn Strathern (1992b) argues that to talk about kinship is to allude to the manner in which the social arrangements are based on and provide the cultural context for the natural process. The process of procreation, according to her, is seen (amongst the Euro-Americans) as belonging not to the domain of society but to the domain of nature, with kinship connecting these two domains. Thus:

> in the case of kinship, what is at issue is the social construction of natural facts. At the same time, established critiques, including those from anthropology, make it evident that what are taken as natural facts are themselves social constructions (Strathern: 1992b, 17).

Strathern's contention has an important implication for the 'doubly complex' task that kinship performs in the face of reproductive crisis within a family in India. Kinship, as culturally perceived, not only connects the two domains of nature and society, but also more crucially bestows legitimacy over the intimate link between these two domains. What is constituted as natural is thus certified by the rules of kinship. Procreation seen as

belonging to the domain of nature becomes curiously social by rendering the 'facts of life' permeable, malleable, and open to manipulation, so long they can be legitimately reconfigured in the language of kinship and relatedness. *Kinship thus authorises just as it authors the process of conception.* In this chapter we saw how the practice of *systematic misrecognition* enables interested parties to collude in re-crafting natural/biological and social links in a bind that is conceptualised as immutable. The purity and honour associated with this biosocial bind is not compromised so long as such transgressions can be tacitly recapitulated into a legitimate kinship unit. The silence that subsumes this process of accommodation is centrally important to its success. The case of Nirmala provoked widespread reaction because she broke an implicit 'taboo on silence'. The Nirmala story is in fact a good example of how communities routinely misrecognise 'open secrets' that lie buried in an unstated silence. It is also clear from the forgoing that if infertility is a stigmatised condition, its clinical management is equally so. While some respondents in this research were open about seeking treatment, most carried out the medical intervention in complete secrecy. Ajay and his wife, as we saw, were reduced to sneaking out because the very nature of reproducing the visuality of fertility, if made public, could further entrench the stigma of infertility. It also carried with it the implication that improvisations in establishing the mother/father/child triad were acceptable only as long as some minimum connection with the 'married body' could be established. The need to keep it a secret, therefore, becomes more pronounced in case of an 'alien genetic input' because, should it become known, the visuality so produced (baby) would have disastrous consequences for the couple: a public violation of the sacred triad. A visible violence to the norms of kinship, therefore, cannot be reabsorbed

within a family and a community to which it belongs without stigmatizing individuals caught in the public gaze. In silently accepting donor egg or sperm, couples and their kin where simply working towards an imagery that would socially mark their offspring as biologically related even though the 'genetic credentials' of the child would be known only to them and not to the community at large. Faced with a crisis, the natural biological base is overridden in favour of the social arrangements. Kinship structures are resilient enough to contain such violations only when they are *invisible.*

The pursuit of conception is a long and treacherous road. While the preceding pages gave an insight into how the normative obstacles are engaged while seeking conception, the next chapter explores the long road to conception and the emotional and financial costs treatment-seeking couples endure.

Notes

[1] One media report acknowledged that Nirmala's case falls in the 'gray areas of the law'. In India apart from general laws that prohibit the use of the body for commercial purposes, there is no specific law that could deal with this petition (*India Today*: 1997, June 23).

[2] In light of the argument in Chapter 1 Nirmala's story can be seen as one of the many contemporary instances of 'double entrenchment' of tradition.

[3] Veena Das has shown that the relations between the State and (religious) communities in India are fraught with creative tensions on the issue of cultural rights. She draws on the case of a divorced Muslim woman - Shah Bano – appealing for maintenance under section 125 of the code of criminal procedure in India and how the involvement of the State came in conflict with the Muslim community and the assertion of cultural rights to practice its personal law. The second case she examines is that of a Hindu woman - Roop Kanwar - who in 1987 was forced to ascend the funeral pyre of her husband to commit *Sati*. The state intervention was met with resistance from a section of Rajput community asserting the cultural right to practice its religious customs. In both cases, the breakdown of the private and public distinctions is crucial to the way communities asserted their 'rights' as lying separate (and hence private) from the public domain occupied by the State. The definition of the community itself in both these cases came to center around the 'organisation of memory' (especially the glorification of *sati* in a mythic/historical mode) thus memory becomes, as Das puts it, 'both an archive and a history' (Das: 1999, 115). The Nirmala case is still unraveling, but it would be interesting to see how reference to a 'cultural memory' (*niyoga*) and the Hindu community's reaction to this, would recreate tensions between Hindu definitions/understanding of procreation as sacred and confined to the institution of marriage, and its commercialization that Nirmala is seeking to legitimise by turning to the institutions of the State.

[4] Informal surrogacy arrangements between sisters or sisters-in-law within a family are reportedly quite common in India. A woman either conceives a child with her partner for an infertile sister to adopt or more recently women have resorted to artificial insemination/IVF using their brother-in-law's semen to conceive

a child for an infertile sister. However there is only hearsay evidence available for these arrangements. There have been in the past some reports in the media on surrogacy arrangements but Nirmala's case stood out as unusual due to its non-clinical nature. To drive this point home, the media accounts drew on popular culture by establishing parallels between the Nirmala story and a film *Doosri Dulhan* (The Second Bride, released in 1983) based on a true life story of a couple in Dadar Hindu Colony in Bombay who paid their maid to bear them a child. In the film, however, the couple hires the services of a prostitute who is impregnated by the man resulting in further emotional complications that need not concern us here. Similarly a recent (2000) Hindi film, *Chori Chori Chupke Chupke*, (Secretly and Quietly) has addressed the same theme, where the protagonists – a married couple – hire the services of a prostitute to conceive through sexual intercourse. Reference to prostitutes in these films is interesting, as it likens such surrogacy arrangements to prostitution, a link that Nirmala is seeking to challenge.

[5] This is unlike the US, where according to Greil infertility became progressively invisible as it was 'transformed from a public experience into a private one' from the second half of the nineteenth century (Greil: 1991, 135-36).

[6] The adoption issue is discussed further in the last segment of this chapter.

[7] Compare this to (an Indian) interviewee, Ganesh, in Eric Hirsch's south-east England study (1993), who insisted that in Indian culture the possibility of anonymous genetic material would not be thinkable:

> Now they want to know, if it's an anonymous sperm, will you know which caste it comes from? So it's completely out of the question, they will never accept it. Never accept it, even if they are given 100 per cent verity it's a high caste, they still won't accept it (Hirsch: 1993, 121).

From the foregoing it appears that such anonymous genetic material is acceptable in some cases only as long as it's kept secret so as to allows couples to claim the 'official', 'visible', 'public', status and role of genetic parents.

[8] Couples and individuals interviewed for this research were in the main interested in a child that was genetically related to them and had turned to assisted conception in that hope. It is critical to understand that not every infertile couple needs donated gametes to conceive. In fact, in a good majority of cases the genetic continuity between the couple and the embryo is complete. Whether the act of bypassing blocked tubes in a woman materialises into a successful pregnancy and childbirth is another matter as the success of assisted conception depends on a number of other physiological and medical parameters. In cases where, on account of ovarian failure or chronic azoospermia, it is not feasible to use the gametes of the couple, a donor input is necessitated.

[9] It might be helpful to recall Dube's contention from chapter 6 on how the metaphorical importance of semen in rural Andhra Pradesh can result in society casting aspersions on its actual source:

> If the physical appearance of a low caste boy and the quality of his intelligence and capacity for leadership, etc. attract attention as being incongruent with his caste status, people try to explain it by alluding to the history of his mother's illicit sexual relations with some powerful high caste man such as a Reddy or a Kamma landlord. 'After all if you sow seeds of lentils (legumes) you will not get a crop of gram' is the logic that conveys the message (Dube: 1986, 29).

Likewise an adopted child runs a high risk of being condemned to carry the burden of his unknown parentage as the only possible explanation of his failings or achievements.

[10] Bharat's (1993) data suggests that adoptive parents were fairly well-educated with 60 per cent or more possessing college level or higher educational qualifications. Nearly two-thirds of the adoptive couples

were dual earner couples. They were mostly engaged in either private jobs (husbands: 47 percent, wives: 36 per cent) or in government jobs (husbands: 17 percent, wives: 12.5 per cent).

Chapter :9:
The Long Road to Conception: Emotional & Financial Costs

Infertile couples bring to a clinic not only their dissatisfaction with a harsh and judgemental society (chapter 7) but also their disaffection with their bodies and the experience of previous failed attempts to salvage their fertility with medical help. The experience of secretly circumventing and accommodating the normative constructs of relatedness while seeking treatment (chapter 8) add to the strain of a continuous search for conception. Whilst on this long road to conception couples accumulate disappointments in the face of eluding conception and struggle to make sense of such 'failures'. The situation is further exacerbated by the high financial costs that mount with every unsuccessful attempt to conceive.

This experience of seeking conception contrasts with emerging evidence from Britain, where women undergoing IVF, 'despite its costs and pains', not only endorse the technique but even feel "it has 'made something of them' as women" (Franklin: 1997, 165). Franklin argues that to better understand why women opt for IVF despite very high failure rates, physical demands, high financial, emotional and psychological costs, such a way of 'making sense' of treatment (by seeing IVF as enabling) must be appreciated. According to her:

> As a 'way of life', IVF was something they [women] coped with ably and knowledgeably, an appreciation that must be borne alongside the very justifiable concerns about IVF as a means of alleviating infertility (Franklin: 1997, 165).

The experience of seeking conception in the lives of infertile couples in this research appears to be a far cry from the empowering experience Franklin's

interviewees reported. A possible explanation, apart from an obvious cultural difference, may lie in the fact that these couples had endured in the past different kinds of reproductive health care interventions. However, there is a valuable theoretical implication in Franklin's position, i.e. that in order to understand why people endure assisted conception – given the high financial and emotional costs – it is important to appreciate how the infertile 'make sense' of such treatments in differing ways. Therefore, how people experience, understand and explain their reproductive struggles becomes a matter of perspective, a way of 'making sense'. Assisted conception in this respect becomes both enabling and disabling, bound up with the material circumstances and cultural location of 'experience' that informs how the infertile – whether British women or Hindu couples – understand medical management of infertility.

The experience of couples in this chapter has been disabling. The narratives that follow are full of expressions of disappointment, anger and helplessness. The emotional and financial burden of assisted conception has turned the experience into one of mistreatment and exploitation. The way these couples make sense of their long haul on the road to conception is by mounting a critique of the way their past/present treatment was and is being handled and the financial burden this is incurring. The wider context of familial expectation/pressure and societal stigma is equally adding to their sense of urgency. While there is no corroborating evidence to substantiate the claims of medical mistreatment made by the infertile informants, these claims can nevertheless be viewed as a way of explaining elusive conception, failed expectations and anger at the way promised outcomes of specific interventions

have not materialise. In pursuing this line, the chapter is trying to resist yielding to the temptation of narrating these experiences as 'objective and truthful' instances of exploitation. Whilst there is equally no evidence to suggest that these experiences are 'mere fabrications,' there is a strong case for locating some of these accounts of exploitation within the context of a long harrowing search for conception often at a high emotional and financial cost.[1] As Byron J Good (1997) argues, in medical [sociology and] anthropological accounts the all 'critical' distinction between power, domination and exploitation is sometimes lost when inequity of power and knowledge in a doctor-patient interaction [or even patient's experience of such an engagement] is analysed as a straight forward case of exploitation.

The chapter opens with an account of the experience of medical interventions in the infertile lives of couples and individuals and goes on to examine the financial costs they bear in order to persist with a treatment that some can ill afford. The chapter concludes with a short discussion of how the clinicians perceive (and make sense of) the critical stance adopted by treatment seekers.

The Long Road to Conception:

For the better part of their married existence - which range among the interviewees from three years to twenty years – infertile couples had been in search of conception. Deeply touching and disturbing accounts reveal a clear and well-delineated trajectory of treatment seeking behaviour that underlay their quest. The predominant response was 'we got married and then nothing happened'. This usually entailed seeking an appointment with the family doctor or a local gynaecologist, thus setting into motion a long and harrowing journey that was still awaiting its logical

conclusion at the time these interviews were conducted. In the absence of clear information and proper diagnosis these couples reveal a pattern of drifting from clinic to clinic, frequently changing doctors, who in turn pursued different lines of treatment, tests and even medication. Lack of proper referrals to specialists (chapter 3) resulted in untimely treatment and at the same time loss of crucial childbearing years. Absence of information on seeking proper guidance for their condition also meant that they relied on word of mouth, recommendations from over-enthusiastic well wishers and the highly visible media propaganda on conception technologies (chapter 5). This frequently meant that the couples travelled great distances across the country in search of the 'right expert'. It was therefore not uncommon to meet couples from Uttar Pradesh (North India) in Bombay clinics (on the west coast), or patients from Assam and Bihar (East India) in clinics located in Rajasthan and Delhi (north-west India). Doctor Suman, for instance, commented:

> Well you know there is a woman sitting outside she is infertile she's been advised IVF by a doctor but when she came here...we re-canalised her [tubes] she is now come for a follow up of that, her husband is in *Shillong* [Assam] and she comes from *Shillong* you know [for] her follow up...she actually belongs to Rajasthan, that is what I am trying to say basically it is the ...a..a..a...they are very strongly motivated and they are so cloistered in themselves the husband and wife they've nobody to talk to, you know for that reason I think they can go to any extent and anything [*sic*] and I would say some doctors really take them for a ride...they do...they do...they do!...I mean they have been kicked here and there and maltreated sometimes you find that they have lost so many years of...so many precious years of not being referred to the right centre, to the right place...

Nearly all accounts elicited from couples undergoing treatment confirmed this observation. The experience of a couple - Rati and Sundar - interviewed in a Bombay clinic is particularly interesting in this respect. Married in 1978 they had been seeking medical help since 1986. All through the interview Sundar kept quiet and listened to his wife pour out her rage at what she saw as shoddy handling of her treatment:

Rati: ...local doctor, and I also showed myself privately [private clinic], took regular treatment they said 'wait and watch', wasted 2-3 years there, he couldn't set it right so we were told that another doctor is good he also said everything is normal reports etc. likewise took treatment from 2-3 very prominent doctors [in the city of Ahemdabad]...afterwords we came here. The doctors I initially consulted kept saying everything is normal...
AB: Do you have a proper diagnosis now?
Rati: Madam said that you are very late, if you had come earlier it would have been much better but then all the doctors kept saying don't worry you will conceive, might take some couple of years so we kept waiting...In Ahemdabad I showed to all the best doctors but they kept saying it will happen, it will happen! These doctors delayed me...I used to think and say just say it to me! Let me stop the treatment, wherever you will say I'll go...but they said everything is normal, it is in the hands of God you will have something...they talked like...whatever they said we did, we never said we won't do this ...the main thing is the doctors misled me they should have told me to go to a good doctor, to Bombay elsewhere...they said why do you go to Bombay we will do good treatment here...

An acute feeling of betrayal further compounds the anger and upset Rati feels at the way doctors treated her. Feeling misled and mistreated Rati and her husband struggle with the thought of having lost crucial years on account of medial incompetence. They are in no way alone. Kavita and Suresh, interviewed in a North India clinic were in treatment for 8 years and yet there was little conclusive medical evidence on why Kavita had miscarried four pregnancies. Having undergone fertility treatment for so long - which meant among other things by her own admission enduring more than 120 injections – Kavita was at the very edge of her patience and fortitude:

Kavita: The problem is only this that the doctors should tell us clearly as to what the problem is. For seven years we have been pursuing the treatment and we must have consulted some 20 doctors in these seven years...this is no life! Even the doctors don't tell us what is wrong...here also nothing but investigations and normal reports, only investigations, no results! If this doesn't show anything try this, if this doesn't work try that...

Jeet and Sonia's experience was again one of endlessly trying doctors and medical tests but very little by way of actual diagnosis and treatment:

Sonia: ...he has [doctor] told us that don't worry you will have a child. So we feel let us try him also

AB: Did you consult other doctors likewise?
Sonia: Yes! Everyone gives hope, nobody says no!
Jeet: Nobody has given proper treatment so far.
Sonia: We do exactly what the doctors ask us to do, but when you go to another doctor after we are completely demoralised and disheartened, he says, no don't do like this, this should be done, not this but this should be done, like this they say.
AB: Have you never asked for any explanation [interrupted]
Jeet: No! we just leave that doctor and move on to the next one. The last report we showed to the doctor here, I [interrupted]
Sonia: The earlier doctor had asked us to do another test, but he [the doctor they are currently seeing] tells us that there is no need for that. We do exactly as the doctors tell us.

It is interesting to see that both Sonia/Jeet and Rati/Sundar repeatedly maintained that they did exactly as the doctor asked them. It is clear that they view themselves as having kept their end of the bargain by fastidiously following the treatment regime thus further heightening the sense of betrayal as doctors failed them by either promising too much or misleading them, whether unscrupulously or not. On the issue of misleading the patients, the case of Harjeet, a farmer from Punjab (chapter 7), stands out as particularly bad as he was given no pre-treatment counselling on what to expect from an IVF procedure and what were its chances of success:

AB: Do you know that a child is not guaranteed in this treatment?
Harjeet: Outsiders, people outside are telling me this [referring to other patients in the clinic's lobby] that out of 100 only 30% or 25% times it is possible.
AB: The doctor didn't tell you this?
Harjeet: No! He did not
AB: Do you understand that there is a possibility that you might not have a child and at the same time there is a possibility that you might succeed?
Harjeet: The doctor did not say in these many words. He didn't say like this. Doctor *sahab* [respectful way of addressing a superior] is saying you will have. He was saying you will have a child for sure.

The doctor's virtual promise to Harjeet above that 'you will have a child for sure' can be understood as a communication gap, or even misleading and a substantial misrepresentation of IVF success rates.[2] This incident also points to a general practice

amongst busy clinicians of not spending much time counselling patients (see chapter 10).

Rekha and Sudhir, a couple interviewed in Bombay, have been married since 1986 and within a year of their marriage decided to start a family. Their experience once again points to a trend of encountering often distressing and unpleasant experiences on the long road to conception:

> Rekha: within a year's time [of marriage] we decided [to start a family]...at that stage we didn't know what was happening we tried the natural way...we talked to our family doctor [and] she put me on some tablets. Later on when things did not materialise we thought of consulting another doctor/specialist Dr. ABC...mentally, physically and financially in all sites we were, at least I felt I was treated like a vegetable...the problem was...we were not gradually treated...okay just keep on taking hormones, keep on taking tablets, keep on taking injections, if you are over-stimulated forget the cycle, if it is alright then let's try, like you know it was not a...I was not very comfortable with the doctor to be honest...
> Sudhir: The problem what she had was easily identified but then later on what happened was a proper line of treatment was not followed...it was trial and error method, trial and error method! It was terrible!...the mental and physical torture was more which you could not take...
> Rekha: ...we were having problems and [interrupted]
> Sudhir: 1991-92 we stopped it...after going through what she did I mean Dr. ABC is very reputed
> Rekha: Very reputed!
> Sudhir: But her approach was very, very inhuman and [interrupted]
> Rekha: Probably she never had the time...you just got dragged along...physically it is a torture, torture in the sense there is a lot of discomfort physically like you have to be mentally prepared for these things [interrupted]
> Sudhir: Number one you have to go through the hormonal treatment then you have to come for the sonography after a particular period, number of days, then [turning to his wife] what's left? What did she use to do? The day I got angry with her?
> Rekha: [laughs] I think it was [interrupted]
> Sudhir: I told her 'I am sorry to say you have lost track what you are doing with her'!
> Rekha: Yah!
> Sudhir: That's what I told, that's what I told her! Better not give the treatment ya? I'll be happy living with her without any issue, I don't want to lose her [to bad medical treatment].
> Rekha: It's like you've wasted your ten years because we don't have any problem it is just a basic simple common cold as we would talk about it in

simple lay man's language, we are not suffering from any severe problems of any kind. I mean that's what I was wondering that ten years are wasted!

This is yet another narrative of abject disappointment and anger, of precious time lost at great emotional, physical and financial cost. Like Kavita, above, Rekha and Sudhir appear to have lost crucial years. However, while resisting 'bad' medical interventions they continued, in the absence of any tangible results, to endure the 'trial and error methods' of the doctors. Resistance of this kind is not uncommon, and is in no way an exclusive preserve of Indian urban middle to upper middle classes, who are often construed as capable of resisting more powerfully. A migrant – Hariram - from a village in Uttar Pradesh, North India, seeking treatment in Bombay together with his wife, was forthcoming in sharing his disappointing experience of medical interventions:

Hariram: We got married 20 years ago. After one year of marriage we wanted a child, I brought her to Bombay. She used to live in the village, I brought her to Bombay and got medication here in Parel [a Bombay suburb] so first the doctor said that her tubes are damaged, closed and after that both tubes were closed...after this we met a doctor who said I'll operate on her, let me open the tubes. We said okay this seems alright too we agreed if we can get a child this way...then he operated, it was not successful, after that we got medication from here and there' after that I met another doctor who said to come here...This could have happened 15 years ago also...after the operation she is in more discomfort, the doctors are at fault, something that is not needed, why do that? First doctor where we used to go used to say 'this method is the only way possible and any other intervention will not give you success'...7-8 years ago we got the operation done which we shouldn't have...they said get the operation done everything will be alright...if we had known the right thing to do 8 years ago none of this would have happened!

After a 20 year struggle, Hariram's wife was finally pregnant and on the day of the interview she had come to the clinic with her husband for a follow up after a successful embryo transfer. Their main disappointment, however, was with the way the doctors in the past took them both for a ride by recommending tubal surgery as the only option (they could have conceived, as they now had, with recourse to IVF which

is less invasive than surgery). It appears that like many gullible patients eager for an early resolution of their infertility Hariram and his wife put all their faith in the doctor's diagnosis and proposed line of treatment. Yet another interesting case was that of Seema and Vani, from the town of Kota in the North-Western state of Rajasthan. Seema, who was undergoing treatment in a Jaipur clinic, had come to see the doctor on the day of the interview chaperoned by her sister-in-law. The sister-in-law, Vani, did most of the talking and gave a detailed history of Seema's long and ongoing struggle with infertility. This is an excerpt:

AB: When did you get married?
Seema: 1987
AB: When did you plan on starting your family?
Seema: Right from the very beginning
AB: What happened [interrupted]
Seema: Nothing in particular but when I couldn't conceive then I showed to the doctor
AB: What was the initial stage like? Whom did you consult and what was the diagnosis?
Seema: Gynaecologist at the hospital
AB: How long did your treatment last before coming to this clinic
Vani: Continuously for two three years we even got her operated but she showed no sign of recovery
AB: Where have you come from?
Vani: Kota
AB: Did you consult someone at the local hospital?
Vani: There's a private clinic [in Kota], she was quite a good doctor and I think she is in London these days. After three years of marriage when we showed her she said tubes are blocked, she opened the tubes, after that we felt everything is okay. Even then nothing happened. For about 2-3 years we were under her treatment since there was nobody better in Kota to turn to, she said this treatment is the best and you leave the rest to God. Whatever has to happen will happen otherwise you are physically fit. We spent 2-3 years like this then we heard of Jaipur...
AB: When you were undergoing treatment in Kota did the doctor refer you to any specialist?
Vani: They consistently maintained that we have removed the blockage from your tubes and now you should have a child. After that the doctor went off to London for two years for further training programme or something. She on her part had closed the chapter. As far as she was concerned she [Seema] was completely fit, [and] we couldn't meet her as she left Kota. For the two years that we were with her she said, you should have pregnancy and that you are physically fit.

Seema, and Hariram's wife (above) are among a number of female patients who underwent surgery as the first line of treatment. By invoking surgery – which is usually understood by lay persons and professionals alike as the last resort - the doctors appear to be following the only option available to them. Gynaecological interventions can do little more than surgically open blocked tubes, a procedure that is sometimes less effective than IVF, where the fallopian tubes are bypassed altogether.[3] Individuals at the receiving end of such needless surgical procedures, like Hariram – who clearly benefited from IVF - quite rightly question surgery in terms of 'something that is not needed why do that?'

The use of hormonal therapies was yet another problem that some interviewees had to face. Sumita and Shankar were struggling with secondary infertility since the death of their only child – a daughter – in 1976.

> Shakar: 1981 the treatment started. We went to Ahemdabad and lots of other places, we went to a lot of places in Gujarat. They gave us hormonal treatment but no result. Nothing came of it!
> AB: What do the doctors have to say about your case?
> Shankar: A lot of doctors used to say 'you don't make ova' while the other lot said that the cycles are not proper.
> AB: What kind of treatment was prescribed?
> Shankar: All were hormonal treatments.
> AB: Did you experience any side affects?
> Shankar: Yes! She put on a lot of weight, cysts in the ovaries [interrupted]
> Sumita: Twice I had cysts in the ovaries!
> AB: Any other complications?
> Shankar: More cysts all because of these hormones!

For over 16 years, Sumita's body was at the receiving end of hormonal therapy, inflicted on her by the very doctors that she and Shankar turned to for help. The narrative paints a story of medical mismanagement, total absence of proper guidance and information, resulting in the loss of crucial child-bearing years at great physical and emotional cost. Neelanjana, a woman interviewed in a Jaipur clinic, made her

upset plain on being at the receiving end of such substandard medical intervention.

Here's a long excerpt from that interview:

> Neelanjana: It is not only the gynaecologists I think it is the entire medical profession itself they have mystified the whole thing. They have, okay we have the technical information this person is ignorant person even if we try to explain they cannot understand the whole thing. They don't have time, they don't have the inclination or the patience to explain what is happening sometimes the patient feels okay my God! I am being treated like a guinea pig. I mean it is so specialised there is no individualistic treatment. I think its just like okay stand in a line, all of you have infertility tac! tac! tac!...that's the treatment you get...I went to a gynaecologist...the first instance was to do a DNC for me [sic]. I asked her, I said why do you want to do an invasive kind of thing, she said 'I want to know what is there', and then she told me you go for HSG so I asked her I said looks like what little I know [if] suppose my tubes are blocked that you would have come to know through HSG why didn't you do HSG first and DNC later. HSG somebody was doing it outside, and DNC was okay it is her power she would have made money. It might be a wrong decision, it might be a right decision but somehow the answer couldn't convince my logic. You think like okay they treat you with hormones, okay you take hormones, you take 'fertil', you take this, nobody did the [pause] this thing [pause] the hormone profile for me! It wasn't done earlier, it is here I did it [the clinic], my first hormone profile it was a little low. You know like there is some kind of a bias also, like all of them have, it's the female who needs to be treated. Whereas if you look at what is being said in the reports about sperm count, why don't they treat the male? You know? Okay the male can't be treated or something there are various options but I feel there is definite gender bias. Okay even some of our I mean the top leading infertility treatment specialists but they only think that the female body which has to undergo some kind of invasive treatment. The first thing is that a male you don't require any invasive thing. All you need to do is a semen analysis. In my case like semen analysis was incidental, you know like they said okay there is a little count but not so low, lets do a DNC on you! and every gynaecologist you go to okay they don't criticise the other I think there is a little professional ethic or something or they are not but you can make out from their body language that okay probably somebody else has made a mistake. I believe when you are treating a person for infertility the patients are paying through their nose they are probably pushing all their savings into this I think there is some responsibility on the part of these people at least to explain to the patients what is happening. You know I have a little bit of biology background, I try to read sometimes I don't understand [but] I have access to text books, what about the other person who doesn't even know about fertilization, who doesn't even know what an embryo is. How can you treat a patient like this? Don't you think your patient needs psychological support?
> AB: They don't offer that?

> Neelanjana: No way! No way! No way...they treat you like [laughs] sometimes when I went for DNC I said God! you are not different than any animal ready to be slaughtered. They don't explain to me I said why are you doing a DNC under GA? There are patients who can't tolerate pain [but] for simple surgery they made me undergo a GA. The only thing is you have to come fasting because you will be operated under GA. How long you will be hospitalised, what will be the after affects what kind of preparation, no preparation even like okay 'you don't have to worry [its a] small surgery', they don't explain. They don't have the time and then also if you ask for information the information is so incomplete that you realise its useless asking them I might as well refer to some other source. I don't think any female who [is] probably going through treatment is not perturbed by this. When you don't understand what is happening, that kind of support is not existing [sic].

Neelanjana's outburst encapsulates most graphically the torment of past medical interventions in the infertile lives of most couples in this research. Like Seema and Hariram's wife, Neelanjana has undergone what appears to be needless surgical interventions and she registers her protest like Rekha - who in turn described her experience as 'I felt I was treated like a vegetable' - in terms of feeling like a 'guinea pig' and an 'animal ready to be slaughtered'. Neelanjana is also unique in respect of being the only individual - amongst those interviewed – who was critical of the gender bias built into the treatment procedure which is focused on the surgical exploration of female anatomy. She is aware that male infertility can be treated with recourse to no (or minimum) surgical interventions, but she uses the simplicity of a mere semen analysis to challenge the tendency amongst doctors to operate on the female body as the first line of treatment. She critiques the sensitive issue of pre-treatment counselling and its absence, which renders her predicament little different from that of Harjeet. Though rural/urban, farmer/professional, uneducated/educated, working class/middle class, man/woman polarities appear to separate them culturally and spatially, it is clear that as infertile individuals they experience the same impersonal treatment, stripped of all social markers and subject to a medical regime

that appears to them (and to other treatment seekers above) a crude trial and error approach in the name of assisting conception.

The Cost of Conception

The emotional and physical costs patients endure are further accentuated by the financial costs incurred while pursuing assisted conception. A few incidents at an IVF clinic in the North of India - where several days of participant observation and interviews for this research were conducted - brought home this reality loud and clear. Here's an excerpt from the field-notes journal:

> On the morning of 5th April 1997 two men accompanied with their wives accosted me right outside the clinic. I had spotted them in deep animated conversation from quite some distance as I was approaching the clinic. On closer inspection I recognised one of the two couples – Sumita and Shankar - as I had interviewed them a day before. Shankar took me to a side looking visibly upset and asked me in a low hushed secretive tone if I could come to his hotel room sometime later in the day as he wanted to tell me something about the doctor. At this point the other man joined us and shouted how there is no humanity in the country. 'The doctor here is after money, money and more money, there is no humanity, show some humanity at least' he sneered. I was beginning to get confused not knowing what fresh event(s) brought on this diatribe against the doctor. Even as I was pondering over the possible reasons - either the treatment wasn't progressing to their liking or the expenses involved were beyond their means – the man retorted to my confused silence 'look at the national culture of money making, look at our Prime Minster can anything go right in a country whose leader is so incompetent'. At this point Shankar chipped in 'there is no humanity and no nationality [*sic*] (I think what he meant was a feeling of nationalism) in the country, the doctors are interested only in your money!' Later in the day I went around to their hotel to find out what was on Shanker and Sumita's mind. 'The doctor doesn't give us a clear estimate ever on how much it is all going to cost' they griped. At first instance the grouse seemed a bit of a damp-squib in relation to the morning's outburst but a subsequent chat with the couple revealed how when viewed in the context of their daily struggles one could make better sense of the emotional roller coaster they were straddling for the past 16 years. They have been coming to this clinic since 24.10.96 and maintain that they don't have to this day a realistic estimate on how much the whole treatment will amount to. Especially given that they travel an enormous distance to the clinic it is not possible or even financially viable for them to make trips to and fro to get more money, which they mobilise in their hometown of Dungarpur on the North-Western tip of Gujarat State. While they acknowledged that the doctor was accommodating to the

> point of letting them pay the balance due, in an event of them running short of money, on their subsequent visits they were deeply upset with the person responsible for collections. Clearly the communication gap between the doctor and the staff was the cause of undue harassment. In the morning on requesting to pay the balance on their next visit the cashier reportedly said something 'obnoxious and rude' that triggered the emotional outburst outside the clinic. Paying for an expensive medical intervention they could ill afford was in their case partly a function of conforming to social expectations and definitions of socially responsible behaviour. Shanker was hit by a personal tragedy earlier in 1996 when he lost his father. They had to rush back home abandoning the treatment mid way. Continuing to explain his present financial struggle he spoke of how meeting the expenses of his father's last rites added to his financial worries. 'The society expects it' he ruefully added while emphasising that any compromises or economising in the proper discharge of the last rites invites social disapproval and ridicule. He likened this to society not approving of individuals who don't make all out effort to secure a child should natural conception fail. Both husband and wife believed that social change is law of nature suggesting that 'everything in nature changes including the customs, traditions, attitudes but to stand up against the contemporary norms is impossible, you have to conform'.

The couple had pulled numerous threads from the world they inhabit to make sense of their long-drawn financial drain. The impromptu invocation of the materialistic national culture and the incompetence of the prime minister by the man in the morning resonated with the couple as bearing testimony to the money-grabbing and impersonal inclinations of clinical medicine. Though they were reasonably happy with the way the doctor accommodated their requests to pay the balance on their subsequent visits to the clinic, they nevertheless held him responsible for the inhuman attitude of his staff. In doing, this they drew parallels between widespread desire for material gain and the political culture that sustains it, seeing the commercialisation of clinical medicine as but one feature reflecting in microcosm the state of the nation. Shanker had conjured a tangled web of complex ideas that he later summed up in an ancient *Sanskrit* proverb that alludes to subjects reflecting the virtues of the king (*yatha raja taha praja*). The couple highlighted how the need to conform to socially defined expectations in respect of birth and death was making it obligatory for them to

go beyond their means. Ajay and Shanti were similarly spending money they did not have, and after two failed attempts the anxiety was mounting:

> Ajay: I did not know [how] much it will cost, I said [to the doctor] we are not very moneyed people we are working class people so we have to have an estimate [as] we will have to arrange the money from somewhere. He said that it would cost about sixty thousand rupees, thirty thousand is the clinical charge and medicines etc. are extra...You see the expense is enormous, it is outside our budget beyond our capacity, but for a child we are trying everything humanly we can do. We told the doctor that our budget is over, he reduced a little for us. The fifteen thousand he charges for IVF I asked him to charge less as my budget for IVF expense is over. I am mobilising money from here and there on interest. You see we live in a family to make the full picture clear to them as to what is involved here is not right. People talk unnecessarily so what we are thinking even if it is expensive and if we succeed then in front of the society it would be a major face-saving [*sic*]. So from here and there I am borrowing money on interest almost double the amount I have spent, sixty thousand was the target. I have spent one lakh twenty thousand [120,000 rupees].

Ajay and Shanti were very anxious after two failed IVFs, since with every failure they dreaded facing the (joint) family back in their hometown. Yet IVF remained as a potential face-saving device which they continued to endure in the hope that success, even at a great financial cost, would result and secure them a new lease of social life.

Apart from the pressures to conceive, the exact scale of the financial costs was not entirely clear to some couples. Jeet and Sonia were totally unprepared for the expense entailed in IVF:

> Sonia: ...even we have our limits, we can't go on like this [referring to various tests]. We can't afford, we are from service background and it is very difficult for us. Here it is too much expensive.
> Jeet: We have done A to Z all the tests here, and the estimate they have given is around 15,000 rupees.
> Sonia: When we started from home with 2000/3000 rupees we had our earlier treatment estimates in mind and we have to go back also, we simply don't have the money! We are here from past three days we are staying in an *ashram* because somebody gave us a written recommendation otherwise just imagine if we had to stay in a hotel.

On her way out after the interview Sonia suddenly turned around and said 'we find this treatment backbreaking, can you suggest somewhere cheaper we can go?' The

anguish in her voice was palpable. She and her husband were in a no-win situation, as they were subjecting themselves to a treatment regime that they could neither afford nor ignore. Kavita, who was seething with anger at the way her treatment was progressing, saw little point in wasting any more money on tests that were yielding only inconclusive results:

> Kavita: Waste, money is definitely being wasted! I always have this tension whatever income is there almost the entire amount is going towards meeting the medical expenses. We can't live for ourselves except medicines and the expense. This is no life! Even then the doctors don't tell us anything. What is wrong?

Kavita sees little point in a 'wild goose chase' that is yielding no result and only affecting the quality of her married life. Pursuing a baby at any cost is therefore not an acceptable solution for her. Individuals like Vani [Seema's sister-in-law], on the other hand, viewed the treatment expense as the corollary of a trade off between fertility and infertility. This was significant as she – Vani - stood as a visible symbol of familial approval to an act of assisting conception clinically, in place of other more normative alternatives like remarrying their son. This is a vital factor in Seema's case, as the 'purse strings' are under the (joint) familial control, and willingness to spend on an infertile daughter-in-law as a consequence translates into a progressive sign pointing to a subtle shift in conservative thinking in tune with the changing times:

> Vani: Actually we belong to the middle-income category so we can't really afford private treatment...it is no doubt expensive but if the result is positive then money is no consideration. When we earn money, we are in a job, okay we will think like for two, three years we did not make any money, that we simply sat at home. If the result is positive then as far as money is concerned I don't think you should give it much importance. If you can afford, I agree it is very expensive and everyone cannot afford it especially middle class thinks a lot before going for it but in this cost if you get the satisfaction [of having a child] then one feels that maybe I didn't pay so much after all. But if the result is not positive then definitely you feel that you have lost everything, you are physically upset, mentally you are upset even economically you will become weak. But if the result is

positive okay when a person works so hard and earns money why does he do it? For his family, for himself!

Money spent on seeking private treatment that lies beyond their means is explained away as worthwhile so long there are results to be carried home. Failure to conceive is experienced as a shattering blow by couples who often pursue the treatment by gambling their life savings to meet the costs or borrow at further expense. Even couples who could bear the financial burden of seeking treatment - including some upper middle class professionals interviewed in Delhi and Bombay – wondered how people of limited or no means must struggle to pay for the treatment. Shakher, interviewed in a North Indian centre, whose wife had undergone an embryo transfer on the day of the interview, was astounded to see large number of people coming to the clinic from the countryside:

> Shakher: Fortunately I am well provided for, substantial ancestral property and personal property to sustain this. But I marvel the number of poor people who come here who literally have nothing to eat, who are pursuing this because of the Hindu mythology and the myths that unless you have a son your forefathers in heaven some stuck up sort of philosophy is there about how they don't get *moksha* something like that...

While the force of religious conviction cannot be ruled out entirely, this aspect never emerged as the sole motivating factor in taking onboard such a huge financial commitment[4]. The gruelling poverty that he alludes to was in part a feature of his urban upper class bias, which essentialised people from the hinterlands as being uniformly poverty stricken. Although compared to educated upper and middle class clientele of the clinic they were certainly disadvantaged, most had modest financial savings and small property holdings that they often mortgaged or sold to fund their treatment.[5] Rekha and Sudhir – who could afford to pay for the treatment - were quick to point out how difficult it was for some people to cope:

> Sudhir: I talk to other patients, other people, these are people who come from monetary wise [*sic*] from a very-very poor background ...money in such cases is not essential - people will sell themselves to get a baby, this is India! It's too important to have a baby.

Sudhir's contention, above, speaks for a sizeable number of patients in treatment for infertility. Harjeet, for example, had sold part of his agricultural land to fund IVF cycles and was prepared to spend even more money if the need arose:

> Harjeet: I did not ask anything from him [the doctor] I only said one thing that we should have a child and do what you like we only have to spend money and that we will go on spending. Then the doctor said that 'you will have a child' so we are getting the treatment done from him on this assurance.

Harjeet's brief to the doctor is clear: that he wants a child. He has not only surrendered his body and that of his wife to medical manipulation (he had already undergone testicular surgery) but has committed himself to spare no expense by pledging full financial support. One can only extrapolate that he will continue to part with his farmland on a piecemeal basis as the treatment costs mount. 'Scientifically' there is no way of foretelling how many IVF cycles it would entail to deliver the promised child, and the doctor's 'guarantee' contravenes available medical evidence on successful IVF outcomes, making Harjeet and his wife vulnerable financially and medically (his wife was in great discomfort on the morning of the interview as she was hyper-stimulated).

Making Sense of Treatment Seekers: Clinicians Speak

From the foregoing it emerges that harassed patients running around, dodging social stigma, familial pressure and at the same time dealing with failed clinical interventions begin to externalise the disappointment. Unassisted emotionally, it is not uncommon for some patients – as seen above - to blame the doctors for failing them. Dr. Chandra summed up the emotional distress the patients are usually under:

> When they come in they think now this is the answer and it's going to happen despite the fact that you tell them it's going to happen to only 25 to 30% of patients, the carry home baby rate is only maybe 15 to 20% but they still feel they are going to fall in that category...when the patient does not conceive its almost like a personal failure [of the doctor] the patient now feels that everything now has become the doctor's fault. Despite the fact that they were explained that this is the rate of success in the procedure they don't see it like that anymore. They feel something is wrong with this doctor, let us move on to the next so whatever their feelings are they want to find a focus, a feeling of disappointment that they try to explain in their own way, it happened because of such and such doctor...

Hoping against hope, couples believe they will make it to the 20% of the projected success statistic, and in the event of that not happening blaming the doctor becomes a way of coping with the failure. Dr. Suman has had similar experience:

> First day you are a God and third day you are a thief. Despite the fact that you [tell them that] you are going to spend so much and it may not end up in pregnancy and you may lose all that you've spent, despite the fact that you tell them you are going to have a lot of emotional trauma and everything they turn around and tell you that you didn't do your job properly, you are not good enough!

Dr. Suman is not alone in experiencing such an emotional backlash from patients struggling with assisted conception. Dr. Kalakar – heading an IVF unit in North of India – in return blamed patients for lying:

> A lot of patients lie even after they have been told what the treatment would involve. Very often I get patients cursing and bad mouthing other doctors. This is a trait of most infertility treatment seekers, they move from doctor to doctor and when they say anything bad about another doctor I am on my guard because possibly I will be next, when they go to the next doctor.

However what the doctor doesn't take into account is how disconcerting and incapacitating the experience of seeking treatment can be, in the face of what are experienced as late referrals, misdiagnoses, failed treatments, false promises and adulatory media accounts of the miracles of assisted conception, growing familial pressure and deepening social stigma. For example, Ajay and Shanti's case clearly

illustrates that, in the face of evasive success, patients find themselves trapped between the dwindling promise of clinical conception and unsympathetic probing from the family:

> Shanti: they ask [family members] 'what happened about your treatment, you've shown yourself in such a big hospital, what happened?' What answer should we give them? [...]
> Ajay: We tell the doctor that first you were reasonably hopeful now after two failures you are not so hopeful we can only say rest we can't do anything!

In the face of accumulating failure, couples look for ways to manage anxiety and explain failure, as Dr. Chandra above suggests, by turning the potential source of conception – the clinic – into the cause of failed conception. Over and above this, when the clinically acknowledged need for active stress management of patients is unmet (chapter 10), this further contributes to a deepening of ambivalence as patients continue to turn to the very clinicians they critique and resist as the individuals responsible for failing them. However, there is another explanation for this, one that originates from within the ranks of clinicians themselves.

Unrealistic expectations are engendered in treatment-seeking individuals not only by media narratives on ARTs, but by clinical encounters themselves. A clinical setting itself can be geared to produce subliminal messages on the effectiveness of assisted conception (see chapter 10), coupled with assurances from the doctors on the positive outcomes of technologies such as IVF – as, for example, in the case of Harjeet. This further disillusions patients when promised outcomes do not materialise. The resultant despondency that engulfs a couple accentuates the sense of being let down by the clinician, a breach of trust and a loss of faith in his or her ability to produce results. This is predominantly the case when patients are needlessly subjected

to medical interventions or given an unrealistic account of the potency of assisted conception techniques. Thus Dr Sukumari asserts:

> Success of any clinic depends on how many of your failed IVFs come back to you! [for more cycles]

Such a measure of success in medical circles is often attributed to comprehensive pre-treatment counselling that alerts a patient on what to expect (see also chapter 10). Many clinicians strongly believed that couples have to be explained to that IVF is not always successful at the first go and that many first time failures do conceive in their second or third attempts. For example, Dr. Jatin feels:

> ...the importance of counselling is to emphasise to them [patients] that this is going to be a long process. Its not going to get over in one month unless you are really-really lucky, that is the idea of counselling and they accept it well because they can cope with failure much better. If they fail they are strong enough they don't just go into a hell again and stop treatment for one year, they are mentally prepared. Okay we predict [depending on the case] ten cycles, six cycles, one year, two years, ten years, that kind of counselling is done right at the outset...

How common such candid counselling is continues to remain a grey area. There is no evidence to suggest that IVF clinics uniformly pursue such a line of pre-treatment counselling. On the contrary, clinicians often criticised rival clinics for making extreme claims vis-à-vis the success accruing from ARTs. Dr. Mukta asserts that the carrot of new technological breakthroughs is dangled in front of expectant patients to enroll them on IVF/ICSI programmes:

> All these new techniques initially when they are brought into the market people are lured, okay ICSI [is popular] because it's recently brought into the country everybody thinks that ICSI gives them the ultimate solution but slowly time will come they will realise that ICSI only improves IVF success by 25% which is not the real picture which is given to the patient. What the patient is told is that 'we've brought this equipment, this is going to give you more success'. What more success? From 15 [%] we may go to 18 [%] it is not told to the patient clearly. They [i.e. patients] see the equipment, they see T.V and [hear it on] radio, they immediately think this machine is really going to produce them a baby...

On a number of occasions, doctors alluded to a common tendency amongst clinicians to fabricate their IVF success rates to lure patients, but the evidence in the main remained anecdotal. Dr. Neeta, for instance, spoke of how in India:

> ...everybody is having a success rate of 45%, 50%, 90%, I cannot be dishonest that is my stress, I tell them [patients] my results are 20%, 25% if I stretch myself too much but I still say a figure of 22% in IVF in ICSI I'll give you figure around 30% and then when they go out and come back and say 'doctor *sahab* he said that 90% of my patients get pregnant', they [other clinicians] talk in consultations like that, and their secretaries sitting outside [in the waiting area] the first thing they tell patients 'at our clinic a lot of patients get pregnant'...I hate dishonesty and these patients when they suffer for 2-3 months they come back to you again[6].

Without naming any person(s), many clinicians similarly stood by the contention that, apart from a handful of 'good clinics', most doctors were simply not doing high-quality work and are making claims pertaining to the effectiveness of fertility techniques that are not consistent with the scientific evidence. It is this which is held to explain how patients come to have such unrealistically high expectations from the treatment process. As Dr. Shanta contends, above, it is mainly members of the medical profession who put such ideas in a patient's head, a point further corroborated and expanded on by Dr. Mukta[7].

Conclusion

The lived experience of infertility is so disconcerting and incapacitating for most infertile couples in this research that waning hope of conception on account of repeated medical failures registers as a failure of an individual practitioner. The paradox at the heart of this quest for conception is that, whilst the infertile make sense of medical interventions by resisting them as unsatisfactory, they continue to endure medical assistance in the absence of any tangible alternatives. The long-drawn pursuit of conception, therefore, perpetuates the vicious circle of simultaneously blaming and believing the clinicians (more on this in chapter 10). The critique in these narratives,

therefore, can also be read as one directed not only against the medical (mis)management of infertility, but rather its inability to deliver the desired resolution – a baby. The absence of this resolution results in individuals and couples 'making sense' of this failure in differing ways. For instance, Nilanjana, Rekha and Sudhir's experience of the treatment procedure had been one of resistance and feeling dehumanised. On the other hand, for couples like Rati/Sundar and Jeet/Sonia it had been one of actively collaborating with the disciplinary modalities of the treatment process by doing 'exactly as the doctors asked'. These couples (Rati/Sundar and Jeet/Sonia) clearly see the role of a clinician in 'decision making' and as a 'gatekeeper to the delivery of services', and as a consequence their (i.e. clinician's) 'decisions gain authority emanating from a medical setting and prove difficult to challenge' (Price: 1999, 30). More generally, treatment seekers appear to be both resisting medical intervention, while at the same time having a vested interest in its pursuance, so as to escape oppressive familial and societal pressures. This also explains why these individuals are prepared to take on board an enormous financial commitment that some simply cannot afford. Sudhir's contention - "money in such cases is not essential people will sell themselves to get a baby, this is India! It's too important to have a baby" - encapsulates the torment of couples, as successive failures contribute to their financial drain and ruin.

The predominant concern faced by clinicians in their practice, in countries like Britain, for instance, is the 'pressure of time passing by' that the patients bring with them to the clinic (Price: 1993). As is clear from the foregoing, in India the treatment seekers bring a lot more to the clinic (also see chapter 10). Clinicians in this context, as seen above, make sense of their patient's tribulations as a means of accommodating failure and as a feature of unfulfilled expectations. The wider context of a 'patient's'

lived experience of infertility adding a sense of urgency to an early resolution of their infertility, however, does not appear to register with some clinicians as being a significant source of anxiety (e.g. Dr. Kalakar above). Nor does the fact that the media narrations can instil unrealistically high expectations in some treatment seekers, even though some clinicians are critical of the way their colleagues misrepresent the potency of assisted conception. In this respect, Harjeet's experience necessitates further research into the potential charges of unscrupulous misrepresentation of treatment outcomes.

The next chapter further extends the experience of treatment seekers and providers into the realm of the clinic. In the main, the chapter will examine how these agents make sense of assisted conception from within the four walls of a clinic, and how such encounters further unfold the process of living with and treating infertility.

Notes

[1] It is worth recalling the methodological quandary, from chapter 2, of whether to treat interview responses as providing 'access to actual experience' or whether these responses are 'actively constructed narratives'.

[2] More on this in the last segment and conclusion of this chapter.

[3] Throughout the course of this research I came to understand from various Assisted Reproductive Technology conferences and scientific symposia, that assisted conception practitioners and gynaecologists alike consider surgically opened tubes (*recanalisation*) as an inhospitable environment for fertilisation to occur. In this respect, bypassing the blocked tubes altogether was often agreed to be the best solution.

[4] A very few individuals from the rural areas agreed to talk about their infertility, though informal discussions with them on occasions pointed to familial and community pressures as primary motivating factors to seek treatment. On the question of religion, there was surprising unanimity in attributing infertility to God's will.

[5] In the absence of any credible economic profile on most respondents (as explained in chapter 2) one can only get an estimate of the level of poverty in rural households and the ownership of land holdings as an indicator of their financial status vis-à-vis seeking expensive assisted conceptive treatment. According to the World Bank figures, 35 per cent of the Indian population is below the national poverty line. In the rural areas this translates into incidence of landlessness as a strong indicator of poverty. The figures for the year 1987/88 are grim. 35 per cent of the total cultivating households had less then 1 per cent of land (virtually landless). Over 43 per cent of these households were living under the poverty line. The incidence of poverty is the lowest (9.57 per cent) for households where more than 8 hectares of land is under cultivation (NSSO: 1990). Likewise the distinction between 'self-employed

in agriculture' households as against 'self employed in non-agriculture' households gives an important indication to the links with poverty and economic well-being. Cultivating households constitute 40.72 per cent of the rural households and the incidence of poverty within such households stands at 24.08 with a percentage share in the all rural households below the poverty line at 32.04. These figures among the self employed households in non-agricultural occupations are (in the same order as cultivating households) 11.70, 26.93 and 10.29 respectively (Gulati: 1995). We can see from this that agricultural households dominate the rural landscape and share the bigger burden of poverty than non-agricultural self-employed households. Also, this clarifies how property holdings become the only source of income generation. Selling or mortgaging land holdings, therefore, is the only viable source of generating resources for the rural clients who have small to large land holdings.

[6] Compare this to Dr. Sushila's contention, in chapter 3, on the need to have ongoing pregnancies.

[7] Commenting on the stresses of setting up an IVF unit, Dr. Sachin, in chapter 3, was quoted as arguing that new clinics have a 'growth phase of 1000 days', in which it is very difficult to source 'young patients'. Many clinics (in this research) stood accused by their competitors of being selective in recruiting young and promising cases who would have conceived regardless of IVF. It seems young couples, who are easier to get pregnant are preferred over those who have been in the pursuit of conception for several years and may even have 'clomid resistant ovaries'. These young couples, as a consequence, are viewed as better placed to improve the success graph of a clinic.

Chapter :10:
In Search of Conception:
Clinicians, Patients & the Clinics

In approaching a physician for help, a patient brings not only a physical problem but also a social context that seldom gets critically addressed during a medical encounter (Waitzkin: 1991). Thus, drawing on Mills (1959), Waitzkin further argues that during a medical encounter, patients bring to their doctors a variety of personal troubles that often have roots in social issues that go beyond the individual (Waitzkin: 1991, 11), rendering medical problems simultaneously social and biological (somatic). In short, Waitzkin argues that since patients and doctors do not examine critically the contextual sources of personal distress – seeing little scope for basic change in context – they talk about adjustments instead that might help the patients continue to function in their usual customary social roles. As a result of this 'potentially relevant modifications in social setting do not arise as topics for discussion' (Waitzkin: 1991, 5).

In the context of infertility, this amounts to a vast dispersion that when collated reveals intimate relationships between irreversible tubal damage, plummeting sperm counts, super-speciality IVF clinics and debilitating social and financial worries, among a multitude of other similar sites that mediate the experience of infertility and its medical management. As sites offering medical resolution to the biological inability to reproduce, IVF clinics in India revolve around the very epicentre of moral, social and medical dilemmas, and the conflicts these dilemmas foster. The doctor/patient relationship as a result can sometimes stand transformed, in that the classic – textbook – doctor/patient

model does not fit in its entirety to these IVF clinics.[1] For instance, patients routinely brought the social context of their infertility to the consultation rooms – but contrary to Waitzkin's assertion – social issues and their wider ramifications for the treatment process sometimes received critical attention in conversations between individuals seeking (infertility) treatment and the clinicians.

This chapter presents an account of how the wider 'social issues' sometimes get addressed in clinical settings, while on other occasions a lack of critical attention – as also seen in chapter 9 - perpetuates the 'social sources of distress and suffering' (Waitzkin: 1991, 5). In doing this, the chapter focuses on the paradoxical nature of clinic/patient interaction that both reinforces high expectations and deepens the ambivalent feelings treatment seekers have about their past and present medical encounters. The chapter deals with certain 'core issues' that the infertile bring to the clinic and with how the clinicians respond to them. In doing this, a case is made for viewing the broader cultural context, in which assisted conception is both understood by the clinicians/patients and explanations for success and failure of treatments are sought.

The Clinical Space

The focal point of an IVF clinic is its lobby or waiting area where the infertile take refuge away from the world outside the clinic. To many, this clinical space is the first introduction to the 'world of conception'. A clinic's lobby appears to respond to the infertile quest for conception in two broad ways: Firstly, by reinforcing their sense of impending conception, and secondly, by providing an element of informality that allows patients to normalise certain 'key' aspects of their treatment procedures. These themes will be examined in turn.

IVF clinics across India are remarkably consistent in their structural organisation in that the clinical space reflects the predominantly urban and upper-middle class ethos. This is significant, given that clinics often reflect, in addition to the urban middle class, the cross-section of rural as well as urban working class infertile populations. Drawn from different social backgrounds, the infertile patients simply gravitate to these urban centres in the absence of any 'affordable alternatives'. Spatially (interior design) the clinics reflect quite accurately the class position of the doctors who own them rather than the sum total of the client base that makes up their practice. Given the upper-middle class location of the ART experts (not surprisingly the clinics are mainly located in affluent neighbourhoods) their interior layout correspondingly oscillates from the smart to the ostentatious. The level of ostentation, however, varies depending on whether the clinic is part of a large privately owned hospital or an individually run centre. For example, clinics in private hospitals in Madras and Delhi closely resembled the five-star hotels in India as plush centrally air-conditioned and chandeliered granite lobbies of the hospital - together with their own coffee, book and flower shops – stood as an introduction to the state of the art clinics. Smaller clinics were comparatively understated but included as part of their decor similar embellishments on a much more modest scale. The entrance to these clinics was mostly through a small foyer that opened into a lobby or waiting area – usually the largest part of the clinic – where the patients waited to see the doctor. This waiting area is particularly important, as it is in this space that the 'core' interaction in the clinics - both amongst the patients and between the patient and the clinical bureaucracy - unfolds. This waiting space is also a junction where the inside and the outside of the clinic intersect. Routes to the doctor's chambers, the laboratories, sonography room, culture rooms, rest

rooms, patients' wards, semen collection rooms etc., all pass through the lobby or make connection with this waiting area in some circuitous way. In this sense waiting areas in IVF clinics occupy a somewhat ambiguous place. While lying at the very heart of the clinic they appear to be outside of clinical bounds. This limnality is peculiar to this space as it mediates the outside world and the clinical world within. Given this unique vantage the waiting area also serves as an introduction to the clinic and the clinical expertise. All settings researched for this study were found to be using this space to make a bold statement about the state of the art credentials of the facility and the expert at the helm of the AR programme. This usually meant that a waiting (potential) patient be exposed to as much information about the facility as his or her captive audience status allowed. A clinic located in the North of India stands as a particularly good example of this method. The clinic in question had a well-appointed lobby together with expensive marble flooring and elaborately designed glass and wood panelled partitioning that separated the waiting area from the rest of the clinic. The walls were replete with paintings and also photographs of the doctor taken with several influential people (mainly politicians) and important clients. The sitting space mainly consisted of smartly upholstered settees along the walls interspersed with tables on which lay magazines and strikingly bulky photo-albums full of newspaper clippings about the clinic and the clinician, along with pictures of successful couples and their new born babies. On several occasions couples were observed flicking through these albums with much interest and fascination. Field notes reveal that a particular woman waiting at this clinic was so overcome by some of the pictures in the album that she tightly clasped her husband's hand and her facial expression became visibly contorted with the effort of fighting back the tears. Another

clinic in the city of Bombay - over and above the usual indicators of a successful clinic as reflected in the interior lay out - had boldly displayed more than a dozen beautifully framed membership certificates and citations of various national and international medical bodies. In another clinic in Bombay, the walls of the waiting area were adorned with similar pictures, certificates and newspaper reports. One newspaper report (duly framed and hung) unabashedly proclaimed "City Doctor Proclaims The End Of Male Infertility – Any Man Can Have A Baby". One significant fixture is the preponderance of baby pictures, a graphic display of babies conceived in the clinic and the faces of proud parents and happy doctors. While at one level unsurprising, it is also clear from chapter 4 that AR conceived babies are much more than a simple medical resolution of infertility, they are highly prised medical trophies that doctors compete to own (and in this case display) as a sign of their achievement. The baby pictures so displayed are either solo shots or simply a picture of the doctor holding the baby. Very rarely do parents figure in these pictures, making the primacy of the medical expert paramount. Many successful parents in media reports attribute the outcome of the treatment to the medical experts. Assertions such as 'this baby is given to us by *doctor sahab*', or 'it feels like the baby is his/her's than mine' (implying clinician's). These statements should be seen more as an expression of gratitude than anything else, but the primacy of the experts in the pictures further illustrates that how the babies so conceived through medical intervention are seen as an individual clinician's triumph rather than as the success of a medical technology.

Clearly, subliminal messages abound in clinical lobbies and waiting bodies rapidly absorb them, which in turn feeds their expectations and structures their opinion of the clinic by tingeing it with awe and hope.

An IVF clinic's waiting area is much more than a mere threshold to the clinical world of conception, since for some treatment-seekers certain important aspects of the treatment process unfold in this space. Some of the most private and intimate moments of the treatment process are rendered openly public here, as day to day rigours of seeking medical assistance culminate in the total demystification of private aspects of the treatment process. The patients and the clinical staff - including the clinician - appear to gravitate towards an unspoken rule of engagement underscored by a sense of functional informality. The focal point in these lobbies is a counter or a desk from where the doctor's assistant or support staff handles inquiries, answers personal and telephone calls and handles patient records while coordinating the doctor/patient appointments and laboratory staff. This is also the usual post where all routine payments for the procedures are made, receipts issued, test reports delivered and future appointments made. While being the bureaucratic nerve centre of the clinic, the wo/man behind the counter often develops an informal working relation with the patients and many times acts as a bridge between the doctor and the waiting patients, especially during the rush hours of the surgery. The sense of informality in these clinics extended to cover all aspects of clinic/patient interaction, nurses would often stroll into the lobby and speak out aloud the name of a waiting (woman) patient and then proceed to instruct her to visit the toilet in order to clear the bladder before a sonogram, all within earshot of others present in the lobby and yet this evoked very little or no embarrassment on part of the patient being so instructed. The issue of producing a sperm sample was similarly broached with surprising nonchalance. In many clinics it was observed that the need for sperm samples was dealt with both by the patients and the clinic staff with extreme matter-of-factness. In a

Bombay clinic, for instance, a couple emerged from the doctor's room and walked up to the counter to pay for the day's appointment only to be told by the duty nurse that they (the couple) would have to come next day for semen analysis. At this point the woman said something inaudible to the nurse, to which she further queried 'where do you live?' 'Bandra' came the reply from the woman. 'Okay if you want to do it at home, it's okay...we have a room here [though]'. After one or two inaudible exchanges the woman was overheard yet again, this time saying 'he'll try here, if he can't do it we will go home and bring it'. 'Bring it within half a hour of collection' replied the nurse. 'Okay' said the woman and they left the clinic. The entire exchange was extremely candid and conducted without much concern for being overheard in a crowded waiting room. In a Delhi clinic, a duty nurse called out a man's name aloud in the waiting room and, as he rose to his feet, handed him a plastic container with instructions. It was difficult to tell whether the man was embarrassed or took it in his stride, but it nonetheless established a pattern of public articulation of some of the most intimate aspects of the treatment process. In yet another upmarket IVF unit in Delhi on one occasion, the doctor walked into the lobby full of waiting patients - on the way to her room – and paused to inquire of one 'did you give the sample?' The man simply replied 'I was waiting for you to get here'. 'No! But you should have given the sample. I told my assistant she should have asked you to give the sample!' The doctor spoke in a high pitched but friendly voice, 'okay please give the sample now'. Slightly self-conscious the man braced himself for the imminent masturbation, collected the sterilised plastic cup from the nurse and entered the collection room. On another occasion in the same clinic, the doctor who was in consultation with a couple was interrupted by yet another couple who had seen her earlier, to ask if her

husband could come alone the next day to give the sample. The doctor, in her characteristic cheerful demeanour, quipped 'if you can produce a sample without your wife please do come alone by all means'. Everyone present in the lobby including the querying couple burst out laughing. In this particular clinic, it was not uncommon for the patients to walk into the doctor's consultation room or stop the doctor in the lobby for clarifications, and on this particular occasion what was most striking was the ease with which the couple walked in, unfazed by the presence of strangers or even the doctor's possible reaction to this out of turn intrusion. On the contrary, their open approach was more than matched by the doctor's ability to invoke humour in dealing with potential inhibitions about aspects of a process such as sperm collection. This episode also highlighted how permeable the clinical space can become, by allowing patients access to areas outside the clinic lobby at will, once the clinic/patient dealings produce a familiarity that everyday interaction tends to generate. Similar observations in other clinics made it apparent that whether it was women's experience of getting ready for tests, or men's experience of producing a sperm samples, the couples dealt with the day-to-day rigour and demands of treatment with a sense of understated straightforwardness and forthright frankness. The routinisation of the procedure was firmly established, and the couples did not appear to feel awkward about openly discussing supposedly intimate and private aspects of the treatment process.[2] It appears that a sense of common suffering permeated the IVF settings, infusing the infertile participants with a feeling of camaraderie. The clinical space in this respect became a great leveller and this effectively translated into no one having to hide anything, resulting in the consequent blurring of private/personal and public distinctions. This is a significant departure from the shroud of secrecy subsuming

assisted conception as seen in chapter 8. The couples (and sometimes their select family confidants accompanying them (chapter 8)), while still anxiously expecting success, came across as sharing with each other precious moments of respite away from familial interference and the wider prying society. Not surprisingly, therefore, the waiting area doubled up as a space for sharing personal experiences, supportive talking and discussing the experience of infertility. Many individuals interviewed commented on how comforting it had been for them to be able to meet and talk with other people in situations not too dissimilar from theirs. Experiences of family pressure, social disapproval and not least the intimidating medical procedures, along with the emotionally and financially trying search for conception, were subjects that patients reportedly discussed amongst themselves.

The forgoing discussion assumes significance in the light of the 'expectations' that patients bring to a clinical setting. For a first time treatment seeker the setting goes a long way towards establishing the credibility of the practitioner, while for those who have been in pursuit of conception for some time the first impression has an added dimension. Having endured past medical interventions at a considerable emotional and financial costs, treatment-seekers feel the need to be reassured that on this occasion their efforts will be worthwhile. Paradoxically, while the themes of credibility and success of clinicians in the waiting area of clinics may help allay fears regarding the competence of a practitioner, they nevertheless reinforce high expectations that in 80 out of 100 cases cannot be met (given that the clinical success rate is generally agreed to be twenty percent).

The informal approach to assisted conception, on the other hand, helps normalize the treatment process, extraordinary in so many respects, to which many couples are subjecting themselves again. The informality, however, addresses a far more crucial issue, one of a need for sympathetic and humane treatment. The credibility of a practitioner, in conjunction with an informal approach to dealing with patients, helps address this issue. To many, the exhaustion of past failed attempts and the harrowing experience of stigma accentuate the need for a human touch. The clinic in this respect is much more than a site for medical management of infertility for these couples. In searching for the right clinic and clinicians the patients are also searching for a refuge and a sanctuary where they can escape the pain of 'living infertility'. This explains the evident catharsis in the clinic lobbies, where on occasions patients purge themselves of pent up emotions. Laughing at the intimate aspects of treatment, or crying at the sight of baby pictures, or even an outburst brought on by the high cost of treatment (chapter 9), gives vent to unaddressed social issues that together constitute the lived experience of infertility.

End of the Road? Clinicians & Patients: An Ambivalent Engagement

Having spent years searching for conception, infertile couples gradually drift towards a 'resist and persist' approach to medically assisted conception. While they are opposed to medical mismanagement they nevertheless persist in the hope that their search for conception will eventually bring them face to face with the right 'expert'. The 'trial and error' approach of the doctors in this respect doubles up as a 'trial and error' search for the correct medical diagnosis and treatment. Such an approach renders the resultant engagement with clinical medicine deeply ambivalent. This was particularly evident

when couples discussed their current ongoing medical treatment, in the light of their past encounters. There was a noticeable departure from the earlier critical reflections on clinical mismanagement of their condition, that points to either a sense of relief or a workable compromise with the standard of clinical assistance now being offered in handling their infertility. Some couples openly praised their ongoing treatment and clinician, in marked contrast to their horrific experiences of the past.[3] Rekha and Sudhir were clearly pleased with their current doctor:

> Rekha: Dr. Shaileja is extremely busy but when she is with you she is with you, even 10 minutes of your time [interrupted]
> Sudhir: She's hardly there with you for 5 minutes but she is totally with you.
> Rekha: You have a confidence then, it's [doctor's attention] not disturbed or diverted at any other person, though she is tremendously busy but I think she is with you. That is what is important and she listens to us, you know that the doctor belongs to you [one doesn't have to deal with] any of the assistants or the junior doctor you know, Dr. Shaileja is with you that's what is important.
> Sudhir: In such cases psychological support is [a] must. We understand this because we have gone through this ordeal and we think we have matured [interrupted]
> Rekha: I just recently went through a miscarriage, I conceived through IVF and GIFT it was six months of pregnancy and then I miscarried and it was with the help of doctor I could pull along
> Sudhir: She was there [the doctor] she was there for the delivery she was there all the time like you feel that is a part of you she is with you all the time she is discussing your problems trying to help you out, she is there whenever you are around. You see all these things are necessary, money is immaterial in such cases, people have money, they don't have money, its immaterial but what is required is a human approach, that is what is needed.
> Rekha: or right kind of advice given to you or if it is for example in a cycle she says this is not going to be possible don't try the cycle, whereas any other doctor behaves like you are just [interrupted]
> Sudhir: you are just dragged along...in fact even after the incident [referring to the miscarriage] we had everything researched, we sat down with her for five days and asked her one thing I said 'doctor is it late now? Shall we go ahead with it? Or shall we forget about it?' She said no you still have time and [I] still can't give you guarantee but, she is there with you. Its immaterial whether we have an issue or we don't have an issue but she is there, that human support is there, human approach is very essential!

'She is there for you, she is there with you' is Sudhir and Rekha's predominant refrain. Having suffered and struggled with clinical medicine for ten years, they have found refuge, a sanctuary in Dr. Shaileja's clinic. Many couples interviewed craved a sympathetic approach, and at the same time appeared prepared for the rigours of the discipline that the 'clinical gaze' imposed on the body, so long it was confined to the manipulation of the 'anatomical body' and did not extend to include the doctor/patient interaction. In that respect, patients sought a softening of the 'gaze', which couples like Sudhir and Rekha clearly experienced in their doctor's 'human approach'. Neelanjana - though highly critical of clinical medicine and its 'inhuman approach' - had reached a point where she was thinking of giving up the resistance all together, in terms of "I am also like fed up okay lets get it over with once and for all, after this what?" However there were reassuring moments in her ongoing treatment:

> ...but one thing is very good, like before I went for this treatment I talked to Dr. Kalakar. I was being offered some consultancy job, I don't have a regular job so I said that look, this consultancy involves travelling, should I take it up and he said ya! why not! That is first time. I said okay that gave me a lot of confidence like otherwise I was thinking oh God! you are going for something artificial something which goes against your whole physiological process maybe, I started feeling that it requires special care a diseased condition but when I talked to him he said you don't require! One thing he told me is its very important for you to be mentally in a healthy state, you know it is more important that you have a rest for the night than if walk for say about two kilometres or so. That gave me a lot of confidence okay lets, let me take things in a stride and he said later you can travel, of course you'll have to be careful...I think here [in this clinic] there is possibility of a dialogue provided I seek information. But they [clinicians in general] somehow they are too busy they can't understand that something is bothering the patient, they will not say okay is something on your mind, can I talk to you, can I help you, you know those kind of things - they will never allay your fears.

Once again the need for a 'human approach' is strongly articulated in the absence of any psychological counselling. This effectively meant – as in the case of Sudhir and Rekha

above – a clinician who lent a sympathetic ear. As a consequence, infertile couples approached new clinics or doctors with a renewed sense of expectancy and hope. Saroj, an infertile woman from Delhi, summed up the never-ending vicious circle of 'wishful thinking' that pervaded such an engagement:

> What is stressful is you know you are going through a process and the doctor says to you 'okay let us see this month' the moment the doctor says 'okay now this month we can see if something works' then your wishful thinking process starts...I think if the patient is well prepared okay we are making our efforts, we are trying our best for this kind of treatment and if the patient is made to relax during the whole process I think it will definitely help...I am now putting all my trust in Dr. Suman this is very important the patient has to put their trust in the doctor...

It is important for Saroj to put her trust in her doctor, in the hope that the doctor will in turn remain truthful, thus consigning the doctor-patient relationship to hinge precariously on an imagined contract based on trust. In the extreme, this expectation sometimes assumes the form of blind faith in the clinician. Dr. Shaileja once spoke during an informal conversation at her clinic about how, in India, there is 'a lot of hero worship,' and that when people come to her they do not come to her clinic but rather 'they come to Dr. Shaileja, it doesn't matter to them where you are attached or what you do as long as you have a big name'. The publicity generated through the media can have such an effect on a patient, but blind faith or hero-worship must also be viewed as a *surrogate cry for help*, a beseeching supplication for a quick resolution - of the social and physical suffering wrought by infertility. Dr. Mukta's - an IVF clinician from Madras – assertion, below, is interesting in this respect:

> Patients accept whatever we say, [whatever] line of treatment, 'Its IVF, okay', 'ICSI, okay' and the patients also say 'whatever doctors says' unlike in the West the patients blindly believe a doctor here, they blindly believe...

Similarly Dr. Neeta – an IVF practitioner in Delhi - spoke of the faith her patients place in her:

> They say we have faith in you, and this is something too big to say and when they say 'faith in you' it means it is something too big somebody has said and that you have to take care of it...

Blind faith is expressed in the clinician's ability to perform a miracle by a feat of medical prestidigitation, rather than a faith in the superiority of the technologies. Interventions like IVF assume meaning only in the context of an able physician, who has the expertise to apply technology to create the desired outcome - a pregnancy. In assuming the primacy of the technician over the technique, some patients place themselves in a situation where they (are left to adulate and) worship the expert as the last court of appeal. It is therefore not uncommon for patients to compare their past medical encounters with their current, and offer lack of success and absence of sympathetic counseling from the clinician as the reason for abandoning the clinic in favour of a new one.

In the wider context of failed past treatments and high economic costs, a patient's search for the human touch evoked two principal responses from the clinicians. Firstly, the clinicians sporadically yielded to the patient's need for compassionate and reassuring treatment by counselling patients in such a way as to address the wider social context of their suffering. Secondly, the clinicians responded to the continuing financial hardships the treatment seekers routinely faced by making concessions towards the costs of IVF and other therapies. Both these responses reinforced the informality that underpinned the clinical settings and allowed for a degree of improvisation in formulating clinical responses to patients suffering.

Searching for the Human Touch

In all the IVF clinics covered for this research there was a clear absence of support to help patients manage their anxiety levels by complementing the clinical treatment with psychological therapeutic intervention. This effectively translated into patients seeking a human touch from the clinicians, and clinicians in turn sporadically fulfilling such expectations by juggling the roles of a counsellor and infertility 'expert'. According to Dr. Sachin:

> ...counselling couples is very-very less, very less, in most centres because the clinicians are too busy or they don't have enough time to counsel the patient, the patients feel that IVF is a miracle treatment first shot they will conceive and when they don't they really take it as a big blow.

It is common for clinicians to refer to very high stress levels, coupled with unrealistic expectations from IVF and other related technologies, in their patients. Dr. Mukta spoke of the stress produced in patients by their feelings of urgency and their high expectations:

> The level of expectation in a patient is that she should conceive at any cost [she/they are] not bothered whether [the doctor] is going to do IVF, ICSI or give hormones or do insemination or just give counselling, the first concern is 'I should conceive'.

Dr. Mukta is not alone in experiencing such pressure from patients. Dr. Shanta, aDelhi based IVF expert, similarly expressed the pressure patients exert on the treatment process:

> ...from three months onwards they start coming...they come and say 'O! doctor please hurry up this process we have already wasted so much time', they will say 'doctor we have done everything even you are saying nothing is wrong' [in cases of unexplained infertility]. Then they will start counting [their] problems...you don't like being driven by the patient and maybe the patient doesn't like it, you don't like it the patient ends up going to somebody [else]!

A patient's sense of urgency, bordering on desperation, can sometimes burden the doctor-patient dialogue, resulting in their abandoning the treatment and opting for another clinic, thus perpetuating the vicious circle of continually seeking resolution and a human touch. Some doctors therefore lay down the rules of engagement at the time of the very first consultation. Dr. Lalit prefers professional distance between himself and the patients:

> When I am dealing with an infertile couple I don't try to go into the depths of their problem I only counsel at a technical level that there is a chance of 20% pregnancy rate, it is a chance you know. I never delve into the social aspects, I feel that you need to be a bit hard with them [otherwise] they start becoming more emotionally laid back once you start trying to relate too much with them about their infertility problems because their problems can have a lot of ramifications you know. I am nice to them but I don't like to go into the depths of what happens with their family, I never go into that area...

In contradistinction to Dr. Lalit, Dr. Neeta takes a diametrically opposite approach to counselling her patients:

> I've sat down with them from time to time, discuss with them, I have heard them cry, I sorted out all their domestic problems and now they are very happy and they are in treatment now.

Field notes on her consultation sessions with couples reveal instances of counselling patients and addressing the wider social issues underlying her patients' experience of infertility. The following entry - made on 4th June 1998 - gives a sense of how the subject of stress, and its implications for infertility treatment, was explained to her patients:

> *A young couple enters the room.*
> Dr: You have a lovely wife!
> M: Thank you!
> Dr: [addressing the woman] How old are you?
> W: 24 years old, married for two years.
> Dr: Do you work?
> W: No. I am a housewife. No intentions of working.
> Dr: [joking] Lucky! [...]
> *After a detailed case history the doctor asks the couple how she can help?*
> M: I only want a baby I am prepared for everything. I am living in a joint family my younger brother got married last year and his wife is pregnant. I

live in a joint family and find it very difficult...I'll do anything [alluding to a sperm test].
Dr: [addressing his wife] you are 24 there is a lot of time [...]
The doctor sensing the anxiety in the couple began by explaining the impact of stress on the endocrinal system.
Dr: The hypothalamus orders the pituitary to begin its work. FSH and LH [hormones secreted by the pituitary gland] come down to the ovaries where eggs are already present and the FSH and LH stimulate the ovaries and the eggs are matured.
Continuing she explains the entire process again, this time using an analogy to make it more accessible:
Dr: ...if the elders in the family are not good what will the junior or younger people do in such a family? If the family elders set a bad example for the younger lot, what can be expected of the young ones. Look at our country, if our political system is so bad what will become of the country. Same way the hypothalamus has to set the right example for pituitary in order for it to be able to stimulate the ovaries. So keep tensions away as it affects the proper functioning of the hypothalamus.
Please promise me you will leave all your troubles here with me. I had a patient who use to call me at 8 o'clock in the evening saying 'my mother-in-law is scolding me' [interrupted]
M: This way she will call you ten, fifteen times a day [laughs]
Dr: [smiles and continues] I told her that either take your husband and go out or if he is scared of his mother you cook for her and pray. She is so pretty just like you and she is so tense. Please promise me that you will not think about these tensions anymore.

The doctor above can be viewed as drawing parallels between the human body and the social body. She drives home the biomedical visualisation of the division of labour in the working of the endocrinal system by marrying it to the delicate power balance in the wider society. However, what is interesting about this approach is its ability to invoke the metaphor of hierarchical familial relations and the rights and obligations that go with such relations. The analogy of a family patriarch setting the right example for the 'juniors' to follow, in the context of counselling, doubles up as an oblique reference to the couple's predicament - which is loaded with undue family pressure to conceive - as irresponsibility on the part of the elders of the (joint) family in allowing the burden to conceive to add to the couple's stress. Sensing anxiety in the man, the doctor appears to

deliberately take up the example of one of her other patients, obliquely alluding to the importance of a husband supporting his wife, in the face of hostility from the mother-in-law, by suggesting that a woman who is unable to enlist her husband's support can do little other than cook to please her in-laws or pray. Dr. Neeta, in other words, addresses one of the core social issues underpinning the cause of stress in the couple's life, by splicing it with explanations more biomedical in nature. She does this surreptitiously – by urging the couple to leave all their troubles with her, thus encouraging them to tackle the source of stress in their lives – for openly confronting these sensitive issues may be viewed as lying outside of her professional remit.

Not all clinicians, however, were as convinced of the merits of counselling patients. In Dr. Shanta's experience counselling worked for only fifty percent of the cases:

> ...for a lot of people the counselling goes to a total waste because they are not interested in knowing how a test-tube baby shapes what really happens even if I make a diagram of the treatment process it doesn't work because at the end of the whole lecture you hear just one sentence 'doctor what medicine do we have to eat' you know, so pre-treatment counselling works for few people, [for a] few it just doesn't work. In the private clinics a lot of educated people are coming, a lot of people who are otherwise very well off but they don't want to work their brains at all and they don't want to understand the logic, on the other hand there are fifty percent of patients who feel very happy because they've been explained something, they really understand the logic and they are the ones who really stick to the treatment.

Three different observations above give an important indication of how individual clinicians approach the subject of counselling and address the issue of the social context of their patient's biological inability to reproduce. It gives a sense of differentials in doctor-patient dialogue across clinics and the value attached to such a dialogue. Whilst Dr. Lalit stays aloof from all social aspects of his patient's condition, Dr. Neeta encourages her patients to tackle such issues, as a means of balancing the stress of

treatment and growing family impatience. There are also some important clues as to what is understood and construed - differently by different clinicians - as effective pre-treatment counselling. These differences are also a feature of individual personalities of clinicians rather than a clinically endorsed criterion of counselling.

Monetary Help

The financial struggles of patients to pay for the treatment are sometimes at the cost of gambling their life's possessions. The clinicians respond to such patients by either reducing fees or by letting patients make up for monetary short falls in their succeeding visits (chapter 9). This gives assisting conception an altogether new meaning. A sizeable number of clinicians admitted to reducing fees, or accommodating requests to pay later for specific treatments, as in the case of Shanker and Ajay (chapter 9). In a Bombay clinic, for instance, the counter clerk was often busy counting wads of currency notes and answering inquiries pertaining to payment procedures and receipts. One man, in particular, was observed asking to pay part of the sum involved (6000 rupees) with the balance on a later date, to which the clerk explained that he could either pay the entire sum on a later date or he could put 5000 rupees as down-payment and the balance on his next visit, as this would make it easier for her to manage the records and issue receipts. In one North Indian clinic patients were observed haggling with the clerks about how much a specific intervention was worth. On the day of our meeting in their hotel room, Sumita (chapter 9) spoke of the steep insemination charges (5000 rupees). She complained that the procedure took less then ten minutes, and that the doctor simply injected the sperm into her cervix, and therefore that given the degree of complexity the charge was unjustifiably high. Many patients pursued this line of reasoning with the clinic staff while

paying for specific interventions. Clinicians, on their part, maintained that they were particularly concerned with the financial burden some patients undertook and therefore felt morally obliged to assist them financially in every way possible. Dr. Suman appeared genuinely worried about this aspect:

> I keep trying to figure out how to keep their costs low to manage them so that they don't have to shell out extra money and at the same time try to keep their stress levels low by giving back results as fast as possible and to try and bring cost down. This is the single most difficult problem for us in India...

In trying to keep the stress levels of the patients down by managing the cost of assisted conception, various clinics were found to be using innovative methods of dealing with patients who could not afford the treatment. Dr. Kamraj had developed an interesting way of discriminating between patients at her Madras clinic:

> Patients who have already been abroad can obviously afford and patients who come to me for long time and they have failed due to unforeseen cause I treat them free, I don't charge them and patients who are mediocre we do come down and give concessions because we identify them as the couple walks in, my people I have taught them to identify, do they have a gold chain or are they wearing yellow thread. You know I say yellow thread give free so all the antibiotics, medicines we give free, the patient doesn't know that we identified her and automatically we try to give maximum concession, knowingly or unknowing we do it but once the patient tries to exploit us in that way then we become very strict, then I change everything, then we are very careful. Even some rich patients sometimes I go out of my way to help them I feel sorry for them and we mostly work like a huge family not doctor patient relationship [*sic*] its more like friends or relations, like that we behave.

The doctor's ingenious way of identifying patients in need of financial assistance is based on a reading of symbols in Hindu and particularly South Indian Tamil culture. Married South Indian Hindu women wear a gold chain - *tali* - around their neck as a mark or representation of their married status, but individuals who are too poor to afford a gold *tali* often make do with a simple yellow thread that stands in as a de-facto *tali*. This absence translates into a commentary on the financial situation of a couple, since

individuals of even limited means do allocate resources if at all possible to invest in such a marker, given its religious and social importance. Additionally, Dr. Kamraj claims to reject conventional 'clinical' distance between her and her patients, although use of metaphors like family and friends is more a description of the informality present in IVF clinics (in India) than an accurate account of the doctor-patient relationship.

Several other clinicians took their patients economic circumstances into account. Dr. Mukta similarly reported that in her centre hormonal administration was carried out free of charge, though patients had to pay for the hormones as they were quite expensive to subsidise. In addition, ultrasound was performed at a nominal rate of 150 rupees per scan and disposables were supplied to the patients at international prices, which worked out much cheaper then the prevailing domestic rates (as import duties made disposables more expensive). On the issue of consultation fees she had this to say:

> ...as far as consultations are concerned I tell them you can pay the doctor after you conceive, if they don't conceive I don't take anything. There are patients who don't pay. I have a couple who is from Vijaywardha, they conceived and even six months after the pregnancy they've not met me or paid me but I am not unhappy. It's okay, there are patients who paid me 8000 rupees and there are patients who have paid me 2000 rupees...

Two other clinicians in South India claimed that forgoing part of the consultation fee or reduction in the price of various procedures was a common practice. One confirmed that if patients make a request he is willing to drop the 5000 rupee charge for consultation, while another spoke of the financial burden most patients undertook by selling their properties and borrowing from financiers, with the result that she had to routinely drop various charges, though, like Dr. Mukta, she too faced repeated bad debts. Clinics in North India also, such as Dr. Kalakar's, were purportedly facing similar problems, with some patients either refusing to pay in the case of failed cycles or simply not returning

after a successful pregnancy. Clinicians like Dr. Sachin had a more systematic approach to patients with financial difficulties, in contrast to the ad-hoc accommodations made by the clinics above:

> 80% of our patients still cannot afford ARTs, only 20% can afford. We have charitable schemes and we do one or two free IVFs per month. The donation fund comes from patients who have conceived and the money is utilised for treating including drugs.

Dr. Manker had established a similar system:

> We have made a Foundation that allows for one or two cycles per month, we don't charge, the patient pays only for the drug cost and the Foundation subsidises the treatment. So we can do one or two cycles at the moment a month at almost about 50% of the cost. Some of the patients who have conceived and delivered many of them we have found like to donate money towards this and we can utilise that money for doing IVF. The moment we tell them since you have had a baby and many patients who really cannot afford this and who need it, so they are extremely willing to help out, so its not a big number but we can do one or two cycles at a much-much lower rate...

These clinicians are, however, not unique in managing high cost treatments by putting in place such mechanisms. Naomi Pfeffer (1992) has shown, in the case of Britain, how in some hospitals patients are asked to make voluntary contributions, while in others the patients' support group raises money to buy equipment. Some consultants even operate what Pfeffer calls, a 'Robin Hood system', that is 'robbing' better-off patients in order to provide free treatment for people who might otherwise go without proper treatment. However, such arrangements are restricted to private/NHS (public) partnerships in Britain, where, according to Pfeffer, gynaecologists have successfully attached IVF clinics on to existing NHS facilities, thus avoiding the large start-up capital costs of an independent unit (Pfeffer: 1992, 67). In the Indian context, on the other hand, these units are exclusively confined to the private sector, with substantial 'personal' financial investments made by individual clinicians. Their sense of urgency in making treatment

affordable is therefore markedly different from the British case, where personal investment predominantly takes the shape of raising funds, or developing quasi-private clinics using staff, equipment and drugs paid for by a mixture of the NHS, research and drug company monies, and charges to patients (Pfeffer: 1992).

Not surprisingly, therefore, the high cost of interventions and their patients' general incapacity to afford the treatment led some clinicians to argue that running a successful centre was not as lucrative a proposition as it is made out be. Dr. Shanta has been disappointed by the attitude of the patients and the returns she has received from putting long hours into managing infertility. In her assessment, IVF offered at the hospital where she heads the clinic is one of the cheapest in the country, since a 8000 rupee consultation fee is split between the embryologist and the gynaecologist. 'I can make more money doing a caesarean section than what I get doing IVF' she stated. Dr. Kamraj maintained that:

> ...they think [referring to general impression in society] such doctors [IVF practitioners] make a lot of money but you can have a test-tube baby lab only if you have an outpatient otherwise you go for tremendous loss...

There was substantial unanimity amongst the clinicians on the importance of having a daily routine gynaecological out-patient inflow to make the IVF programme financially viable. There are number of factors involved in understanding the spread of assisted conception in India, given the high investment and uniformly high cost that is consequently passed on to patients. As is clear from chapter 3, a rift between gynaecological and infertility specialists has not only set in motion a struggle for credibility to manage infertility, but also a rush to hold on to one's patients, destroying in the process the referral chain vital to appropriate and timely infertility treatment. This has

also meant an aggressive marketing of infertility techniques hitherto unavailable to the majority of the population. The need to subsidise IVF, therefore, can in part be viewed as lying at the cusp of altruism and need for commercial gain. While clinics do try to accommodate poorer patients it cannot be entirely ruled out that it also provides an opportunity to undercut the competition. Where genuine altruism ends and commercial needs begin is difficult to ascertain. In short, it is not easy to say whether the need to make assisted conception more affordable and straightforward is born out of a need to simplify an agonising wait for conception, or to capture the fertility market (chapter 3). However, it does significantly alter the face of medical engagement between clinicians and patients, by suspending the contractual approach to buying and selling medical care that underpins medicine in the private sector.

Despite the informal arrangements between clinicians and their patients, the treatment outcomes remain uncertain. The success of a procedure like IVF is not bound up with a clinician's expertise nor located in the technology itself, the elusive pregnancies are subject to a number of other critical parameters (both technical and biological) that together produce 'results'. This uncertainty, and the lack of results, at once places the clinicians and the treatment seekers in a cultural paradigm that helps rationalise and accommodate 'failures', 'failings of clinical medicine,' 'perpetuation of suffering' etc. This explanatory frame is religion.

End of the Road or Dead End? From Clinicians Hands Into God's

The suspension of 'scientific rationality' - the hallmark of clinical medicine - is at its most prominent in a clinician's ability to explain the unpredictability of assisted conception outcomes by resorting to rationalisations more metaphysical in nature. The success or failure of any treatment was partly acknowledged as a product of scientific and

technical interventions, beyond which lay the unexplored realm of the unknown that was best understood by resorting to explanations more spiritual and cosmological in nature. In the clinicians' understanding there were definite limits to what could be achieved through scientific expertise, beyond which the work of God was at work in creating human life. Ironically, if assisted conception was 'man's' way of assisting when nature failed – as routinely described in medical literature and popular media accounts – then the process of assisting nature itself needed assistance, which drew back on the conceptualisation of 'nature' as 'God'. Rati and Sundar's assertion in chapter 9, for instance, has a passing reference to how, in their earlier clinical encounters, they were repeatedly told by the doctors that 'everything is normal, it is in the hands of God you will have something', an experience not dissimilar from Seema's who was (according to Vani, her sister-in-law), told by her doctor that her 'treatment is the best and you leave the rest to God' (chapter 9). Leaving 'things' to God emerged as routine clinical practice as couples were repeatedly told by their clinicians that after the most sophisticated interventions to bypass their infertility, their case now rested with a 'higher court of appeal' that would determine the eventual outcome of the clinical efforts.

This explanation places the tentative nature of science and the technological management of the human body in sharp relief. Without exception, all the clinics studied were favourably predisposed to the idea of divine intervention in the process of clinical conception. This was most discernable from pictorial and iconographic displays of various Hindu gods and goddesses, as well as patron saints, in the clinic lobbies and inside the clinician's consulting rooms. One clinic in South India is named after a local goddess whose name literally translates in English to mean 'the mother goddess who

protects the womb' (*Garbba Rakhambigai*). Infertile couples in search of conception congregate at her temple from all over India. This juxtaposition situates an IVF clinic in relation to divine blessings associated with reversing the scourge of infertility. Religious beliefs, therefore, emerge as playing an important role in routine clinical practice. A further example was encountered in a clinic in the North of India where a large signboard, conspicuous by its bold display, occupied a prominent part of the clinic's waiting area. The display was entitled 'IVF/GIFT Patients – Instructions'. A long list of dos and don'ts to be followed by the patients while in treatment was succeeded by one last instruction urging patients to:

> ...not think too much of the results and leave everything to God or your destiny, your treatment was carried out to the best of our ability.

This approximate translation from Hindi gives a clear sense of how uncertain or unwanted treatment outcomes are explained by appeal to the role of destiny (*bhagya, niyati*) and God (*ishware*), rather than by empirical and 'objective' 'clinical' facts (such as the 20 percent chance of success). Accounts of couples and individuals substantiated this tendency. Shanker for instance, when asked whether he was prepared to face the high failure rate of the treatment, had simply this to say:

> Shanker: Doctor was saying that [the failure rate is high and that] it is all up to God, whatever we can do we will.

Similarly Ram Naik – a patient whose wife had undergone an embryo transfer on the day of the interview – had this to say:

> Ram Naik: Right now ET is going on the operation is in XYZ hospital. So far the response is good, even the doctor has told us so that the result is with the all mighty...

In both Shanker and Ram Naik's case, it appears that the clinician - having done his or her best in trying to induce a pregnancy - was simply awaiting a supernatural verdict on his/her efforts.

The reasons for such a reliance on spiritual/religious explanations are complex. Whilst clinicians may hold firm religious convictions which help them understand limited success, or indeed success more generally, in their chosen field of medicine, turning to God was also a way of managing the anxiety that typically accompanied the running of a successful IVF programme. There is a great stress to continually produce results and remain financially viable by recruiting newer patients to the programme to ensure its commercial feasibility (chapter 3). Dr. Sachin is one clinician who attributed the successful functioning of his clinics to the cosmic forces and saw no harm in turning to complementary therapies to assist the assisted conception process, as he is of the firm belief that despite all the advances ARTs continue to be a 'partial science':

> I believe a lot in God; in astrology; palmistry; I believe in *Vastu* science [ancient craft of positioning like *Fung Shui*] you know position science. All my four centres are designed as per *Vastu*, the culture room is situated in the corner that is supposed to be best for producing new life, O.T tables are in the right direction to aid conception, magnetic fields whatever, whatever, whatever! [*sic*] these are all now turning out to be good sciences so we don't go blindly by it but [also] ART is incomplete science. In whatever we do we are not exceeding 32% that means we are not good enough. Today I find so many sperm counts improving with *aruyvedic* treatment, so many sperm counts improving with homeopathic treatment. My first pregnancy, her husband's mother was a good homeopathic in Jabalpur and two IVF cycles we had done for her in Bangalore before. First cycle she came here (Bombay) she was the eighth IVF here. Her endometrium was very thin just 6mm; go through any literature, endometrium on the day of ET has to cross 8 to 10 mm to get a pregnancy. Three beautiful embryos, I told her that you don't have much chance because of 6mm endometrium. Without telling me she took homoeopathic pills before and after the embryo transfer that her mother had given her, she conceived and delivered! That means ARTs are an incomplete science, when our books say 8mm is the cut off, most Western literature says

> endometrium less than 8mm cancel the cycle. So all my failed ETs I send them for homeopathy you know as a contributory medicine because it doesn't really harm it might only do good! *Vastu* and all that was done three years ago having made those changes the success rate jumped, the economic picture jumped, financially we have jumped, everything changed. Astrology you won't believe this but couples if they go to a good astrologer they are told that okay this is the best month for you to conceive and almost 70 to 75 % of cases it works out if you correlate. We are not a complete science okay if we can say 100% guarantee for IVF cycle fine, then all these other sciences have no meaning but where is the 100% guarantee? Where is even 50% guarantee?

The doctor's faith in complementary medicine and what he describes as parallel 'sciences' reanimates clinical practice in a way that assumes the shape of a potent critique of the tentative character of clinical medicine. His predominant concern is to induce conception rather than a broader ideological commitment to scientific rationality. The eclectic combination of the clinical and the non-clinical, therefore, helps the doctor to manage the questions that biomedicine leaves unanswered. His spiritual beliefs, in this respect, stand in to fill the vacuum of uncertainty that clinical medicine has failed to fill with so-called rational explanations. The engagement with divine or cosmic forces in this respect becomes a mechanism to make sense of the unknown in the working of the human body. Nowhere is this need more pronounced then at the stage of embryo transfers. Clinically, it continues to be a grey area, as the exact conditions that contribute to the success or failure of an embryo implant remain relatively unknown. Dr. Neeta also invokes divine assistance in the process:

> I am a great believer in God, greatest believer on earth! When I put embryos in the uterus I keep praying, I keep praying, I tell my patients 'please tell God to leave everything now and come and be with me just for half a second only. You don't need God more than one second, just tell God be here for just half second, please God come here! I am a great believer in God!

The doctor's cry for help, and the patient's participation in summoning God's help to assist conception, goes beyond creating a fleeting intimate bond between the clinician

and the patient struggling and praying from within the definite limits of science. More importantly, it highlights an acknowledgement of having traversed the scientific terrain only to arrive at a frontier where one encounters the great 'unknown' in the absence of any persuasive explanation. God, therefore [in the context of the clinic in India], stands in for an absence of rational explanation, and is invoked for guidance and success. Dr. Suman is another example. When asked whether she believed in God her answer was quite simply:

> Suman: I do! Of course! O! Ah! Of course! Of course! I believe in God very firmly! In the sense that whatever I may do I can try my best like I go through their entire case history, trying to do my best, to make my correct judgment and yet she doesn't get pregnant. After the embryo has been transferred it all depends on God or nature. You may call it Nature or God. In medicine anywhere what is faith healing after all? When the patient comes to you what are you doing for him basically the faith that is going to play a major role. We are talking about anxiety and stress, when the patient is doubting you when the patient doesn't get confidence or faith in you then the results are not going to be good because her stress levels are going to disturb the endocrinal profile. That is what God is, there is a saying that 'Doctor is God' they are going for the treatment cycle we are Gods for them so it's a cycle I have to believe in something in order to perform therefore I believe in God!

In approaching religion, doctors make sense of the uncertainties of clinical conception but also echo how patients approach clinical healing. Dr. Kamraj in a recently published autobiographical account (1998) reveals:

> My mother said "You should have a Guru to follow". I thought a superhuman being was better than a human being. I do not trust human beings – each one has a drawback. You have to be a super being to be perfect, clear and right. I chose "Lord Vinayaka" [Ganesha the Hindu Elephant God of good luck and prosperity is known as Vinayaka in Tamil Nadu, South India]. He has always been my guru, my guide and my best friend! He is someone I look up to, someone from whom I can ask for anything, scold, fight, pour out my despair and frustrations and yet he never chides me or gets angry with me. Isn't that just great! He has been my most faithful and best friend. He has not ever harmed me. He has always done the best for me and will continue to do so! Even if something negative happens, there is sure to be a hidden reason which

will surface later. Lord Vinayaka is one I trusted, I trust and will trust till the last breath of my life [*sic*].[4]

The excerpt above provides a glimpse into how some Hindus approach the idea of the divine and the otherworldly. The relationship between the deity and the disciple is forged in the spirit of a parent-child relationship with accompanying allowances that such a relationship affords a child. Individuals may choose the metaphors of parental bond, friendship or even mutual love to create such a relationship. Thus complaints, demands, even occasional tantrums are means of attracting the benevolent attention of the parental figure. An accommodation such as this (totally) undermines the possibility of a devotee turning blasphemous, or into a plain heretic, as routine displays of anger against an unyielding deity (which in its extreme can amount to questioning the divine credentials of the deity), are explained away as a remonstrating child who would eventually be placated with parental love and reasoning.

This conceptual framework also appears to inform the doctor-patient relationship in the Indian context, as doctors and healers have conventionally been viewed and revered as life giving, sustaining gods – a point to which Dr. Suman obliquely alludes above. In this context, it may be worth recalling Mani Chadwa's assertion in a media report (cited in chapter 4) on the birth of 'her' and 'India's first scientifically documented test-tube baby':

> Anchor: The Chawda couple has a special place for Dr. Hinduja in their heart: Mani Chadwa (Mother): I was never...I was not meant to have a child...but madam did the test tube and gave me a baby. We consider Indira Hinduja God. She is our God. Madam made it possible, everything she did, I feel she (Harsha) is her daughter...

The media renditions - such as Mani Chadwa's - on the 'experts,' can assume a quasi-sacred iconographic dimension and result in the projection of 'demigods of fertility' as the only beacon of hope. Paradoxically, like the Hindu trinity, a doctor along with giving and sustaining life (*Bhrama* and *Vishnu*) can also play the part of life destroyer (*Shiva*). Equally, like the various gods and goddesses in the Hindu pantheon who may be critiqued from time to time as failing their devotees, doctors too are construed as failing their patients, and this may invite protestations from those let down, but equally an eventual resolution and return to the deity/doctor as the only source of comfort and healing. I am not suggesting that the infertile couples in this research perceived the clinicians as quasi-divine but rather that the healing professions – including clinical medicine - in India, have for long been viewed as sacred, with medical/healing work looked upon as noble and imbued with extreme religious merit. An analogy between the sacred domain of a culture and its healing tradition - of which clinical medicine is now an integral part – gives one reason to see how cultural conceptualisations may reanimate social interactions – such as doctor-patient relations – to carry culturally embedded meaning. The growing cynicism with the material culture corrupting the medical domain, echoed by Shanker in chapter 9, is not dissimilar from the momentary disenchantment, and even alienation, experienced by devotees when their deities fail them. Referring to the downfall of a noble (medical) profession, a couple interviewed in a Delhi IVF unit summed up their dejection as follows:

> Everywhere it's become a business these days...otherwise previously I remember 20 years back we use to think God is, I mean doctor and God together you know, doctor used to be the God...

Doctors, or rather 'fallen Gods,' though consistently and individually critiqued as having fallen from grace are continually approached in the absence of any tangible alternatives. The deep ambivalence permeating the clinical encounters in this respect only mirrors the Hindu engagement with the sacred domain - as in both instances in spite of the disappointments – the devotee/patient returns to the source with renewed supplication.

Conclusions

The clinical world of conception as seen in this chapter is deeply embedded in the cultural topography. The very act of seeking conception is – paradoxically – both an escape from, and conformity to, the dominant social norms about fertility as a logical outcome of married relations. For clinicians the very nature of their work – treating infertility – renders them incapable of confronting critically the social/cultural sources of distress and suffering in their patient's lives (with notable exceptions like Dr. Neeta). Unwittingly the clinicians continue to reinforce the cultural norms about fertility (chapter 6), and the unjust treatment meted out to the infertile (chapter 7), by, for example, colluding in the secrecy surrounding treatment-seeking (chapter 8). This is further exacerbated when clinicians promote themselves and assisted conception through the media as 'benign' and as a 'solution' for infertility (chapter 5). This may serve the purpose of promoting individual claims to credibility (chapter 4), or even the commercial viability of a clinician's high investment private enterprise (chapter 3). However, these ideas are reinforced microcosmically within the clinic where the 'promotional themes' permeating the lobbies reinforce in a patient a sense of expectancy while instilling an oblique assurance that their current investment in assisted conception is worthwhile. When such hopes are dashed, the treatment seekers understandably view this as a

personal failure of a clinician (chapter 9). The infertile, on the other hand, can uncritically respond to the cultural pressures in seeking assisted conception to salvage their infertility and 'save face', once again reinforcing the dominant cultural norms about infertility.

Infertility treatment is not merely restricted to the 'mechanics' of offering and receiving treatment, but more crucially how the clinicians and the infertile couples make sense of the cultural context. The success and failure of assisted conception, when placed in the universe of Hindu faith, becomes a powerful critique of the 'incompleteness' of the science of conception. Placed in the broader context of a clinician's faith, assisted conception conjoins disparate domains of the sacred and the profane, the human and the superhuman, science and religion, all working together to produce human life. This points to a significant suspension of technical and scientific rationality, on which the philosophy of the clinic purportedly hinges. This enchanted version of a 'thoroughly disenchanted worldview' of biomedicine is part of a larger cultural process of 'indigenisation of biomedicine' (Kleinman: 1995).

These metaphysical explanations also become culturally acceptable coping mechanisms for the clinicians and their patients, as they both struggle to make sense of repeated failures, stigma, financial drain, lack of credibility etc. In brief, the paradox at the heart of clinical conception – one of resisting/critiquing and persisting - is in this sense extended further where the clinicians and patients not only forge fleeting 'intimacies' and 'informalities' but also begin to accommodate 'failure' within the same religious/cultural paradigm that produces social suffering and stigma in the first place.

Notes

[1] Frances Price has argued that in Britain (in relation to IVF), 'the classic textbook doctor-patient format' is compromised as the focus shifts from 'the patient' to the couple and 'the doctor', that is the clinician or IVF practitioner, is paired with a scientist, usually an embryologist, with whom s/he shares a division of

labour (Price: 1993). In the context of IVF clinics in India and in the light of Waitzkin's contention, one can go beyond Price's clarification on this 'new relationship' and show how relationships between the doctor/couples are sometimes shaped by the wider cultural context of infertility.

[2] Cussins (1998b) shows, in the case of infertility clinics in the US, that the 'circumstances for blurring the distinction between public and private are so pervasive in infertility clinics that there is a well worked-out choreography of privacy' (Cussins: 1998b, 89). The boundaries between the private and the public appear more blurred in the Indian context, the vocal and candid articulation of the intimate (sexual) aspects of the treatment helps normalise this process. Therefore while boundaries between private and public are maintained, for example by assigning a separate 'on site collection room', they are equally transgressed by the informal approach of the clinical staff and clinicians.

[3] It is important to emphasise that given the treatment-seeker's present commitment to the clinic in which these interviews were conducted, the responses were likely to be positive, especially when compared to their treatment experiences that in the past had proved hopeless. Clearly, these couples would not be pursuing treatment in a clinic if they did not have a degree of 'faith' in the clinician's ability to treat infertility.

[4] Reference withheld to maintain anonymity.

Chapter: 11
Conceptions: A Summation

'Once anything comes to this country it only grows our soil is fertile, everything grows!'
An IVF clinician in Delhi

Since 'cultures do not hold still for their portraits' (Clifford and Marcus: 1986), I have developed a photographic image of the culture of infertility and its clinical management in India. This has meant that, like all photographs - good and bad - I have managed to frame and capture only a fleeting part of the scenery. Each chapter in this thesis therefore offers the reader a 'snapshot' of the world of infertility and its cultural location. Through these different points of entry into a poorly understood area of human reproduction in contemporary India, I have shown how infertility is both managed and dealt with as a biological and social disruption. This task has not been an easy one, as the very process of grappling with these complex issues has posed many more multilateral research questions. However, it has been my intention to provide an insightful point of departure for all future research engagements with infertility and assisted conception in India.

This study contributes to the neglected area of research on infertility and new high-tech conception possibilities in a non western locale. The rapidly globalising technologies of conception like IVF have entered numerous developing regions like South Asia, South America, North Africa, China and yet very little research has gone into understanding the cultural complexities underlying this global movement of assisted conception. As outlined in Chapter 1 the scholarship emanating on the issue of infertility and new reproductive technologies has tended to remain narrowly

focused on the lives and experiences of Euro-American women. While the feminist critiques of 'ideologies' of nature/culture, deeply ingrained in the notion of 'reproduction', problematises how infertility is both constructed and treated as a biomedical category in the West, they do little to promote understanding of cross cultural differences inherent in the 'politics of conception'. This thesis has attempted to redress this lacuna by tracing infertility and conception technologies in India in a number of different locales in which infertility is experienced and conception technologies used, contested and promoted.

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At its broadest the thesis has suggested the importance of viewing the process described by Veena Das (1999) as 'double entrenchment of tradition' while examining the concepts of modernity and tradition in India. In so doing the research responds to Strathern's (1999) contention that diverse locations will find diverse reasons for the use of techniques like IVF. It is therefore not surprising that the cultural reasons and processes in which infertility and western technologies of conception are embedded in India significantly depart from those emerging in western academic debates (chapter 1). The research has instead sought to show how the 'traditional' Hindu conceptual domain is reanimated both at the realm of treatment seeking and offering in the context of intractable infertility. It emerges that while more classical ideas of fertility and infertility may potentially offer ideological grounds for making new conception technologies an acceptable family founding alternative (chapters 6 and 8) its more robust presence in the garb of open religiosity in IVF clinics (chapter 10) is not only reanimating both the traditional and the modern but also doubling up as a potent critique of the tentative nature of 'global science of conception' in the 'local Indian context'. The private/public dialectic that is

foundational to the emergence of assisted conception in India (chapter 3), as indeed the contested nature of assisted conception emerging in the media narratives (chapters 4 and 5), points to yet another facet of India's reanimated modernity where 'demigods' of conception are constructed, promoted and circulated through the secular media channels in order to keep their private IVF practices economically viable. The silent treatment seeking and the experience of stigma that scars lives of innumerable women is once again sustained through the entrenched traditional patriarchal order that spills not only into the daily lived experience of ostracism but also into the clinical domain where the very process of seeking medical treatment is subsumed in silence so as to minimise the societal disapproval that disallows any arrangement that it perceives as an affront to the 'rules of patrilineal marriage' (chapter 7) and those violating the cultural ideal of the 'double conceptual bind' (chapter 8). Such isolation exacts its price both financially and emotionally (chapter 9). Unassisted and unsupported the infertile treatment seekers continue to struggle within the confines of entrenched traditional norms and ideas in the modern day context.

The location of this study within such diverse terrain of 'conceptions' has revealed a number of new insights and raised some crucial questions. In what follows I will attempt to summarise the main arguments of this thesis and raise some questions for future research.

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As a point of departure it is essential to outline some of the difficulties and limitations imposed by the data on this research. As mentioned in chapter 2, contact with the clinics and interviewees was restricted due to problems of access. The process of interviewing was, in most cases, less than ideal, as the couples could only be approached in the clinics. As a consequence, the possibility of follow-up

interviews was minimized considerably. Most importantly 46.5 per cent of interviewed couples and other individuals could not be interviewed again, either together or separately. In most cases couples were either returning to joint household or were not interested in follow up interviews. The fact that women could not be interviewed separately does have implications for the data in this study as bias arising from gender inequity in relationships cannot be ruled out. I have therefore remained focused on infertility as experienced by the conjugal unit rather than women and men as individuals. This is especially crucial because the 27.9 per cent of husbands and 20.9 per cent of wives interviewed separately shared their experiences of treatment seeking and infertility in terms of 'us' rather then 'I' or 'me'. This is significant as the absence of the partner from the interviewing process did not change the context in which the interviewees narrated their experiences. When asked pointed questions about personal assessments or feelings the response, though personal, culminated into how the couple made sense of the issue. The research draws its strength on the other hand by inhabiting multiple sites and by eclectically drawing on ethnographic practices, critical textual analysis and open ended semi-structured interview techniques. In so tracing the metaphor of conception 'multi-sitedly' (Marcus: 1995) the research has succeeded in collating a range of data sites.

The Indian state's support to private interest in medicine has significantly altered the face of investment in modern high-tech medical facilities. As a consequence, individuals and industries are making investments in the private medical sector and are responding to the curative medical needs left unfulfilled by the public sector. As argued in chapter 3, assisted conception's journey from its public sector beginnings to a private sector monopoly is indicative of a long sustained interaction between the public and the private sectors. The research thus found that in

the private sector, clinicians and enterprising gynaecologists turn the very process of assisting conception into an unprecedented opportunity to enhance their professional, financial and social standing. The unravelling of the politics of conception in the media becomes one way of establishing professional and scientific credibility that can potentially obfuscate peer-reviewed and endorsed credibility. Such credibility, and the financial reward that ensues, has resulted in a media/medicine interaction that has come to promote both the technologies of conception and their practitioners. Whilst raising serious questions about the ethics of such self-promotion through the media, this admixture of science, journalism, and advertising has promoted a benign image of these technologies and their practitioners. The validation of conceptive techniques through media narratives therefore becomes part of a much larger private sector initiative, where clinicians struggle to run infertility clinics as financially viable and commercially successful enterprises. If one views what Price has called the 'marriage of medicine and the market' (Price: 1999), in the context of assisted conception in the west, then one is confronted by the chronically under-researched upbeat climate of investment in the private medical sector, and equally absent research on the role of the Indian state in controlling the unabashed spread of this sector. This is indicative, as stated in chapter 3, of a wider state of disarray within the Medical Councils, that have failed to maintain an up-to-date profile of qualified private practitioners in India, a situation further amplified by the under-reporting of hospitals in the private sector. It is therefore hardly surprising that no hard baseline data is available on the spread and take-up of assisted conceptive techniques in India. If the reasons for the spread of assisted conception can be located in the public/private sector dialectic in health care, then the reasons for their uncontrolled and undocumented spread can equally be viewed as indicative of a much broader, uncontrolled and poorly regulated private

sector expansion, under the supportive public sector gaze. With the entrance of the 'corporate hospitals', India appears to be heading in the direction of the 'medical industrial complex' (Relman: 1987) endemic in the western countries. Whilst this development may eventually steer health care towards a 'two tier' health system, like that of Britain, where only those who can afford to pay have access to superior care (Franklin: 1997), it is important to keep in mind that the private sector in India, unlike in the west, is diverse in its make up, and that barring the 'corporate hospitals' offering state-of-the art medical care, the private sector is in no way a guarantor of superior care (Nandraj: 1994). In this context, the lack of regulatory mechanisms and the Indian state's laxity in legislating private sector expansion becomes even more problematic.

More than a decade ago, Spallone and Steinberg (1987) warned us that what the world in general, and women in particular, face is 'an international multi-billion dollar competitive race among scientists, pharmaceutical companies, medics, and politicians to lead in conquering this last frontier of human domination over nature'. The private sector monopoly over assisted conception, and a series of transnational IVF collaborations drawing global players to 'soft states' like India, where there are minimal legislative controls in place, restates the urgent need for further research in this area. There is a tremendous dearth of research on the role played by the multinational corporations and pharmaceutical companies and their interest in pushing for greater medicalisation of infertility. In the western context, Burfoot (1995) has tried to show that, due to the high degree of reproductive hormonal manipulation of women and ovulation assessment associated with NRTs, pharmaceutical companies have capitalised enormously on these developments. Elsewhere, Burfoot (1990) has shown that Organon and Serono (two pharmaceutical

giants), have substantial financial interests in the promotion of IVF technology. This dimension needs particular attention in the Indian context, as new reproductive technologies have received unprecedented media attention, particularly since 1989, with the so-called liberalisation and opening of the Indian economy to foreign investments. Against this backdrop, the internal functioning of IVF clinics in India needs to be critically scrutinised, especially the need to run private practices at an optimal level so as to maintain economic sustainability and viability. This necessitates a wider examination of the self-promotion of clinicians through the modern media channels. This is rendered even more crucial in the light of purportedly unrealistic success claims and charges of medical mismanagement (chapter 9). On the contentious aspects of the success claims of IVF there is very little social science research save a few notable exceptions. Laborie's data from a 1987 research, for example, suggest that at a large number of IVF centres in France the success rate, in terms of live births, was almost zero. Similar research looking into the efficacy of IVF has shown that IVF leads to the birth of a baby only 5 to 10 % of the time (Klein: 1989). Likewise, Klein and Rowland (1988) have shown that the failure rate of IVF in Australia and the United Kingdom is 92.6 % and 91.4 % respectively. In an article in the official journal of the American Fertility Society - Fertility and Sterility - Dr. R. Soules, an associate professor and director of reproductive endocrinology, very clearly stated that 'the widespread practise of exaggerating the IVF pregnancy rate appears to be a marketing ploy to lure prospective infertile couples into becoming active IVF patients' (Soules: 1985). In 1987, Drs. Blackwell et al., in the same journal and in an article titled – 'Are we exploiting the infertile couple?' drew attention to the inappropriate use of credentials to lure patients. These arguments, especially the feminist researches, are over a decade old and there appears to be a near total absence

of research looking at the success rates of interventions like IVF in the 1990s. At one level, this can be read as indicative of a broader, less critical shift in the feminist and social scientific thinking on assisted conception as outlined in chapter 1. The low success of technologies, therefore, does not invite the same critical scrutiny as it once did in the feminist scholarship of the 1980s (Arditti et al: 1984, Cores: 1985, 1987, Stanworth: 1987, Klein: 1989). In fact, in the 1990s, the low success of technologies does not necessarily discredit them as a treatment option. As Franklin argues, 'a very high percentage, 95 per cent, of the women interviewed were well aware of the low success rate of IVF before they decided to attempt it' (Franklin: 1997, 83). These shifts in the west notwithstanding, the feminist studies on IVF success rates from the 1980s can help formulate agenda for subsequent exploration of assisted conception in India, especially in the light of claims made by the clinicians in this research vis-à-vis serious misrepresentation of success claims. In this respect, the incongruous disjunction between the public image of assisted conception (chapter 5) and the private acknowledgements of its tentative nature (chapter 10) becomes a valid point of departure for future research on success claims. The Indian state has in the very recent past (1999) woken up to the rapid spread of assisted conception in India. The Indian Council for Medical Research (ICMR) is in the process of formulating what it describes as the 'Guidelines for Assisted Reproductive Technologies in India'. It is envisaged that with the publication of these guidelines, the whole question of controlled application of assisted conceptive techniques will re-merge in the public domain and would be hotly debated through the various media channels. Future research would have to take into account these ongoing developments, which may effect a fundamental change in the way infertility treatment is offered.

Though seemingly worlds away from the 'modern' biomedical politics of conception, the 'traditional' realm of ideas and norms about fertility remain a centrally important component to any understanding of the biomedical management of infertility. In choosing to assist conception through modern high-tech conception technologies the clinicians also choose to inadvertently reinforce these conceptual ideas. While the ancient sources explored in chapter 6 testify to the quasi-sacred nature of human fertility originating in ancient texts, law codes and myths, they do reverberate in contemporary Indian settings as the anthropological and sociological studies amply demonstrate. The stigma attached to infertility, is in fact one crucial manifestation of the strength of these conceptual ideas. As chapter 7 shows, the process of *delegitimation* can implicate the couple despite the overriding tendency to blame women for failed conception. The stigma and ostracism is borne out of an open violation of the 'rule of patrilineal marriage' that is clearly instilled in legal codes like the *Manu Smriti*. However, the fact that traditional normative solutions, like abandoning barren wives, are *not* invoked, invites attention to the experience of infertility within the context of a strong conjugal bond. Equally it invites attention to the inferior status of women in Indian society. The very fact that the patriarchal structure allows men to abandon 'barren' wives, whether or not they choose to exercise this option, perpetuates the gender asymmetry. Give that women exist in this state of 'institutionalised disempowerment' one can further read the experience of a 'married infertile woman' in the broader context of being 'lucky' enough to have a supportive husband. This, however, poses a far more complex question which is especially important in the context of 'conjugal treatment-seeking' given that out of an average 10 year married duration, the couples in this research had sought treatment for 7 years. Does this make assisted conception an important component, or even a

'natural filter' through which only the strongest of conjugal unions can pass? The fact that these couples persist in seeking treatment in the face of the widespread practice of abandoning women/wives in infertile marriages necessitates more research in this area. This research also complicates the nature of stigma in the Indian context. It can no longer be analysed as a straight case of spoilt identity but rather more pertinently as 'contagious' leading to the *delegitimation* of the infertile couple. The very nature of patriarchy also emerges as fundamentally complex, as for example, the case of Harjeet (chapter 7 and 9) amply demonstrates. The fertility competition between his wife and sister-in-law in the face of vocal support for adoption from the wider family in rural Punjab poses some complex questions about how patriarchy speaks through the bodies of indoctrinated agents. The daily squabbles between two sisters-in-law has in this case created conditions that force Harjeet to press ahead with expensive treatment by selling his agricultural land with the unconditional backing of his brothers and mother. Agricultural land is a highly prized commodity in rural India and the backbone of patriarchal (unilineal) social reproduction thus making sons crucial to the transmission of land rights. For Harjeet and his family to sell 'fertile land' to treat a replaceable/substitutable 'barren field/wife/woman' necessitates urgent research to explore the complexities inherent in gender relations in India.

Another important manifestation of the cultural norms and ideas about conception, lies encapsulated within the treatment-seeking strategies that the infertile couples employ to make their fertility visual. In chapter 8, we saw how the practice of *systematic misrecognition* enables interested parties to collude in re-crafting natural/biological and social links in a bind that is conceptualised as immutable. The purity and honour associated with this biosocial bind is salvaged by tacitly recapitulating any transgressions into a legitimate kinship unit. The silence subsuming

this process of machination ensures that the couple, or the colluding unit (i.e. family members), succeed in crafting such practical kinship even though it remains partially connected to the married body on account of donated gametes. The whole process is deeply affected by the fear of openly (visibly) violating norms and ideas about relatedness and sacredness which lie at the very heart of the contemporary Hindu worldview. This explains the reluctance towards adopting from unknown sources, as it strikes at the very core of the 'double conceptual bind' and fractures it publicly. In this respect the Indian case significantly departs from the Euro-American concerns that view the concept of nature and culture dominating the model of biological reproduction and kinship structures (Strathern: 1992b). As the research shows when faced with a reproductive crisis the social arrangements of kinship take precedence over 'natural biological' base within the 'double conceptual bind' thus authorising the process of conception by silently authoring it within the kin domain. However the process of systematic misrecognition permeating the treatment-seeking strategies of couples and their families needs further attention, as it remains an inaccessible and difficult aspect to research. Hence, a number of questions that arose in chapter 8 – e.g. pertaining to the preferred 'agnatic source' of donated gametes and adoptees – need particular attention. Women's growing resistance at being made accountable for their husband's infertility emerged as another important dimension for future research which poses bigger questions about subversion, even open defiance of patriarchy (chapter 8).

The strain of coping with such normative prescriptions is emotionally and financially debilitating for some treatment-seeking individuals. The research has shown how the waning hope of conception and constant pressure from the families/society, registers as the failure of an individual practitioner to many

treatment-seekers. The long drawn-pursuit of conception, as chapter 9 and 10 show, perpetuates the vicious circle of blaming and believing the clinicians. The couples 'make sense' (Franklin: 1997) of their treatment and elusive conception by remaining critically focused on the finer processes of their past and present treatments. Such criticism, despite its manifest focus on the medical (mis)management of infertility, or even lack of sensitivity on the part of clinicians, seems to be directed against a clinician's inability to deliver the desired resolution of their infertility often at a very high financial cost. Ironically, faced with an absence of any tangible alternatives and mounting urgency to conceive, the treatment-seekers continue to persist in seeking conceptive technologies. Clinicians, on the other hand, while blame their profession for instilling unrealistic expectations, do not critically revisit the positive renditions in the media on the benign conception technologies as partly responsible for such high expectations. These are themes that they themselves reinforce microcosmically within their clinic lobbies, thus instilling a sense of impending conception in the treatment-seekers and an oblique assurance that their current investment in assisted conception is worthwhile. The criticism of colleagues, as seen in chapter 9, merely reinstates the same professional rivalry and competitiveness that underlies the contests for credibility and the need to hold on to their respective 'patients'. Within the clinic, however, both the treatment-seekers and the clinicians appear as struggling with infertility within the definite boundaries of the clinical science of conception. The very act of seeking conception, as argued earlier, becomes both an escape from, and conformity to, the dominant social norms about fertility. As chapter 10 argued, the success and failure of assisted conception, when placed in the universe of Hindu faith, becomes a powerful critique of the 'incompleteness' of the science of conception. This means, in the context of a clinician's faith, assisted conception conjoins the

disparate domains of the sacred and the profane, human and the superhuman, science and religion, all working together to produce human life. This accentuates the paradox at the heart of clinical conception, where clinicians and treatment-seekers critically evaluate each other, as well as forge fleeting intimacies and informal accommodations towards the costs of the treatment. Most importantly, the absence of 'results', or 'failure,' is contextualised by the clinicians within the same religious/cultural paradigm that produces social suffering and stigma in the lives of the treatment-seekers. The IVF clinics in India need to be more systematically examined. To do this, researchers will have to surmount the difficult task of gaining access to these institutions for some length of time. This is crucial, if new insights into the reconfigured face of IVF clinics in their cross-cultural *avatar* are to emerge.

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The management of infertility in India lies at the threshold of a culture that not only views fertility as quasi-sacred, but as connecting the worldly and otherworldly domains. Whilst the pursuit of conception in the lives of treatment-seekers in this research appears entrenched in more worldly concerns, like managing accentuating stigma and societal pressure, the power of science to bypass infertility is partly located by the clinicians in an otherworldly realm. This conjoining of two widely separated domains is intimately related to the double entrenchment of tradition in contemporary India. In exploring these conceptions, what this thesis has done, is to examine the domain of assisted conception and those that assist and sustain it. It is hoped that future research will add new insights to how assisted conception in India is being promoted, used and understood. In this respect the present research is both an invitation and a commitment to future research.

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